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Mammals and Birds of the Manu Biosphere Reserve, Peru

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Mammals and Birds of the Manu Biosphere Reserve, Peru

Bruce D. Patterson

MacArthur Curator of Mammals
Department of Zoology
Field Museum of Natural History
1400 South Lake Shore Drive
Chicago, Illinois 60605-2496
U.S.A.

Douglas F. Stotz

Conservation Ecologist
Environmental and
Conservation Programs
Field Museum of Natural History
1400 South Lake Shore Dr
Chicago, Illinois 60605-2496
U.S.A.

Sergio Solari

Doctoral Candidate
Department of Biological Sciences
Texas Tech University
Lubbock, Texas 79409-3131
U.S.A.

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Mammals and Birds of the Manu Biosphere Reserve, Peru

Bruce D. Patterson, Douglas F. Stotz, and Sergio Solari

Abstract

The eastern slope of the tropical Andes and adjacent Amazonian lowlands are home to some of the world's richest biotas. Here we report on recent surveys and inventories of mammal and bird faunas in Peru's Manu National Park and Biosphere Reserve and compile these records with prior literature, museum specimens, and unpublished records to produce updated lists for both taxa. The lists of 222 species of mammals and 1005 species of birds recorded along an elevational transect in the Manu Biosphere Reserve are the largest for any similarly sized area in the world. Mammals recently documented in the reserve include 147 species, 130 with specimen vouchers. Twelve species were new to science, and most of these have been recently described; four others might be new and are currently being evaluated. Twenty-nine mammal species are newly added to Manu's list. The cumulative tally comprises 20 species of opossums, 1 shrew opossum, 2 armadillos, 5 sloths and anteaters, 92 bats, 14 primates, 21 carnivores, 1 tapir, 7 even-toed ungulates, 58 rodents, and 1 rabbit. Avian records include 682 species with specimen vouchers and another 108 documented by recognizable photographs or voice recordings. The avifauna is largely resident, including 911 species that are year-round residents, 42 migrants from the north, 24 migrants from the south or other tropical areas, and 28 vagrants (represented by fewer than three records).

Resumen

La vertiente oriental de los Andes y las selvas bajas adyacentes de la Amazonia alojan algunas de las biotas más diversas del planeta. Aquí presentamos los resultados de recientes estudios e inventarios de faunas de mamíferos y aves en el Parque Nacional y Reserva de Biosfera del Manu, en Perú, y añadimos estos datos a la literatura previa, especimenes de museo y registros no publicados para producir listas actualizadas para ambos grupos. La lista de 222 especies de mamíferos y 1003 especies de aves registradas en la Reserva de Biosfera del Manu a lo largo de este transecto son las más diversas para alguna área de tamaño similar en el mundo. Los mamíferos recientemente registrados en la reserva incluyen 147 especies, de las cuales 130 están representadas por especimenes de museo. Trece especies corresponden a especies no descritas y nuevas para la ciencia, la mayoría de ellas recientemente descritas, pero otras dos podrían ser nuevas y están siendo actualmente evaluadas. Veintinueve especies son adiciones recientes a la lista conocida de mamíferos del Manu. El conteo acumulativo incluye 20 especies de didélfidos, 1 musaraña marsupial, 5 perezosos y hormigueros, 2 armadillos, 92 murciélagos, 14 monos, 21 carnívoros, 1 tapir, 7 sajinos y venados, 58 roedores, y 1 conejo. Los registros de aves incluyen 682 especies con especimenes de museo y otras 108 documentadas por fotografías o registros de cantos reconocibles. La avifauna es mayormente residente, incluyendo 914 especies que son residentes anuales, 41 que migran desde el norte, 22 que migran desde el sur u otras áreas tropicales, y 26 fuera del rango geográfico normal (representadas por menos de tres registros).

Biological Surveys and Inventories in Manu*

Bruce D. Patterson,† Douglas F. Stotz,‡ and Sergio Solari§

Introduction

In 1973, the Peruvian government created one of the largest and most pristine nature reserves anywhere in the world. The preserve was christened "Manu" after the meandering river that courses through its lower reaches. Most of the park is situated in the lowlands of the department of Madre de Dios, although its highlands lie in the adjacent department of Cuzco.

The park's origins were chronicled by Kim MacQuarrie in a beautiful book illustrated with photographs by André and Cornelia Bärtschi (MacQuarrie, 1992, 1998). To us, it seems especially fitting that this magnificent park owes its origin to Peruvian naturalist-collector Celestino Kalinowski. Kalinowski was born and made his home in the Marcapata valley just south of Manu. He traveled widely in Peru and beyond, and he shipped specimens that he collected to major natural history museums the world over. However, his collections were especially strong from the region surrounding his home. The place names "Hacienda Cadena" and "Quince Mil" are well known to students of South America's vertebrate faunas. So valuable were those he shipped to the bird and mammal divisions of Chicago's Field Museum that the Museum sponsored his trip to Chicago to study his and other collections and to confer with the scientists—Colin Sanborn, Philip Hershkovitz, Melvin Traylor, and Emmet Blake—who were studying material that he sent here.

Alarmed by growing commercial development in southeastern Peru in the 1960s, Kalinowski sought to secure governmental protection for the natural areas remaining in best condition. He actively lobbied governmental official Don Felipe Benavides to advocate setting aside a "reserved zone" consisting of the entire watershed of the Manu River. He also escorted Major Ian Grimwood, an English consultant hired to locate a national reserve in the Amazon, to Manu. Although Grimwood had earlier concluded that much of Peru's Amazon forest had already been despoiled, Kalinowski opened his eyes to Manu's pristine riches. A three-week trip sufficed to convince Grimwood that Manu was the place for the reserve, and he so reported his recommendation to the government. A year later, in 1968, Manu was declared a national reserve, and hunting and lumbering were prohibited. In 1973, the area became a national park, ensuring its legal status and protection. In 1977, UNESCO recognized its global status by making the national park and an adjacent reserved zone—an area of 1,881,200 hectares—Manu Biosphere Reserve. A decade later, it was named a World Heritage Site, one of only 200 areas in the world accorded this designation (MacQuarrie, 1992).

Recognition of Manu's incredible biological riches has grown hand in hand with the reference collections of its plants and animals. Seemingly, each collection made there added more species to the regional fauna; many proved to be species new to science. Despite focused biological collections in Manu for more than 50 years, this still applies today, even to the best-known vertebrate

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† MacArthur Curator of Mammals, Department of Zoology, The Field Museum, 1400 South Lake Shore Drive, Chicago, IL 60506-2496, U.S.A.

‡ Conservation Ecologist, Environmental and Conservation Programs, The Field Museum, 1400 South Lake Shore Drive, Chicago, IL 60506-2496, U.S.A.

§ Graduate Student, Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409-3131, U.S.A.

groups—birds and mammals (Fitzpatrick and Willard, 1990). During the course of surveys in Manu in 1999–2001, our teams added dozens of additional bird and mammal species to the park list and collected the first-known specimens of many undescribed species of mammals.

Modern surveys in the park can be traced to collections made by John W. Fitzpatrick and David E. Willard, mostly after their arrival at the Field Museum in the late 1970s. Manu had already become incorporated as a national park, and both men had completed their doctorates at Princeton University, where John Terborgh had initiated studies of Manu. Over a series of years, they visited various sites along the Eastern Versant and in isolated foothill ranges, like the Pantiacolla. Their collections and surveys contributed to Manu's first scientific mammal and bird inventory, organized around Terborgh's studies at Cocha Cashu (Terborgh et al., 1984).

One of us (DFS) was a participant in the last of these expeditions, which took place in 1985. Remarkably, the team met Celestino Kalinowski, who gave them a long-delayed consignment of specimens for the Field Museum; Kalinowski died the following year. But the collections that Fitzpatrick, Willard, and their companions made and deposited in the Field Museum and San Marcos University in Lima attracted the attention and interest of others, including the authors. In 1984, James L. Patton and colleagues from the University of California at Berkeley sampled mammals at various montane sites along the Alto Madre de Dios drainage as well as in adjacent valleys of Cuzco. Between 1987 and 1992, Don E. Wilson and colleagues from the Smithsonian Institution conducted a series of studies at Pakitza, a guard station at the northeastern boundary of the park, under the auspices of Terry Erwin's BIOLAT (Biological Diversity of Latin America) program. In 1989–1990, Víctor Pacheco evaluated the mammals of Puesto de Vigilancia Acjanaco and environs as part of a team led by Kenneth Young, returning in 1991 under the aegis of BIOLAT to sample the Cosñipata drainage; César Ascorra, Sergio Solari, and Elena Vivar, all of the Museo de Historia Natural, San Marcos, also participated in these programs. Results of these expeditions were summarized in Manu mammal lists by Patterson et al. (1992) and Pacheco et al. (1993), who presented the first detailed listing of mammals distributed in the reserve, documenting 190 species across 32 sampling localities. Voss and Emmons (1996) updated the mammal list for Cocha Cashu and Pakitza, tallying 139 species at this lowland "site". Meanwhile, Terborgh and Carol L. Mitchell executed the "Amazon Biodiversity Project," adding several species to Manu's list of mammals (Mitchell, 1998). Solari made additional trips to explore highland communities with support of the Chicago Zoological Society (Brookfield Zoo). Harald Beck of the University of Miami studied and sampled small terrestrial mammals at Cocha Cashu, which were reported in Beck (2002) and Leite-Pitman et al. (2003).

The far-more-complete bird list grew much more slowly and in less specified fashion through repeated visits by ornithologists and birders attracted to Manu's incomparable avifauna. An early list assembled by Charles Munn that included records from Fitzpatrick and Willard was published in the first MacQuarrie volume (Munn & Wust, 1992). Concerted sampling in the environs of Pakitza was reported by Grace Servat (1996). Barry Walker and associates continued to ply the slopes for additions to the bird list (Walker, 1998, and continuing). Incidental records by itinerant ornithologists continued into the 21st century.

The establishment of the Biotic Surveys and Inventories (BS&I) program at the National Science Foundation breathed new life into efforts to inventory hyperdiverse tropical biotas. Because a primary focus of the BS&I program is to generate collections and databases for unstudied groups and regions, the mammals and birds of Manu were not a high priority. Most Andean vertebrates are represented in collections even if many remain poorly known. However, the ectoparasites of these species surely were. No systematic collections or study had ever been devoted to the mites, ticks, fleas, chewing lice, sucking lice, bat flies, bot flies, and others that treat Andean mammals and birds as hosts, although Guerrero had published some novelties from early expeditions (Guerrero, 1996a, 1996b). We enlisted a cadre of collaborators to study these collections and recruited several ectoparasitologists to assist us in harvesting arthropods in the field.

Methods and Study Area

Our field plan called for sampling vertebrate and parasite communities over an elevational

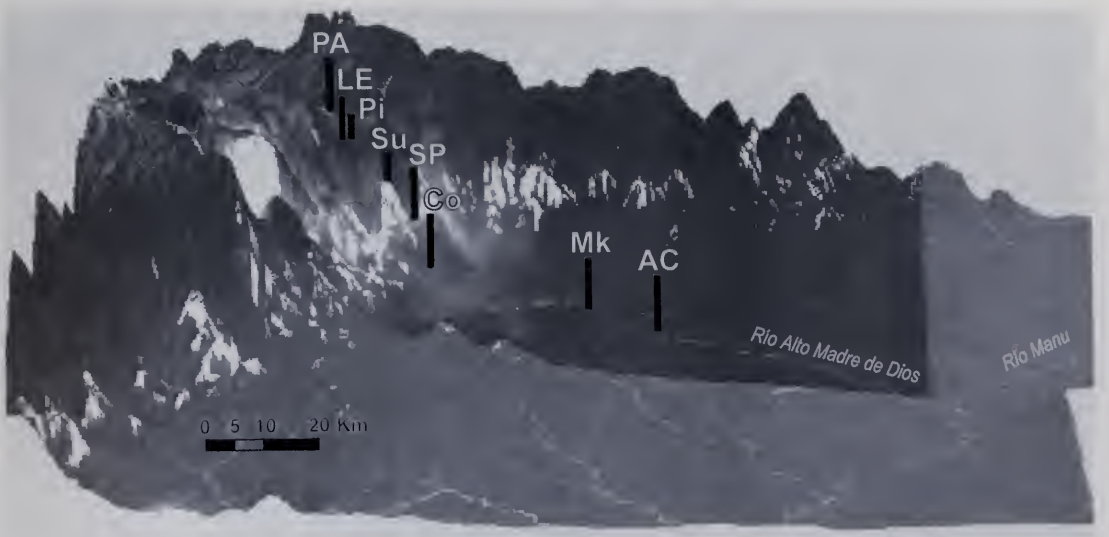

FIG. 1. A digital elevation model of Manu showing the elevational positions of the 8 collecting localities visited in 1999–2001.

gradient, to encompass the maximal range of habitats and inhabitants. Because the lowest stretches of the Manu reserve—including the Cocha Cashu Biological Station and the BIOLAT research station at Pakitza—were the best sampled, we intentionally focused our work on higher elevations. There, the succession of habitats and their elevational limits are a complex product of biology, edaphic factors, temperature, and precipitation (Young, 1992).

Over a three-year span, we worked at eight sites distributed along an elevational gradient oriented by the Carretera Paucartambo-Shintuya and north of the axis created by this road along the Río Alto Madre de Dios (Fig. 1). Although the gradient was intended to be complete and balanced in itself, it was designed to complement and expand earlier sampling efforts (Pacheco et al., 1993). Teams of mammalogists, ornithologists, and parasitologists were assembled from the staff, students, and associates of the Field Museum and Museo de Historia Natural, Universidad de San Marcos (Figs. 2, 3). From 1999 to 2001, we took to the field during the dry season (August–November), although the "2000 field season" was eventually executed during March and April 2001. We spent three weeks at each elevation, using as many techniques as possible for documenting and collecting mammals and birds at each elevation and for harvesting their ectoparasites.

For mammals, we used mist nets at each elevation, placing them on the ground in likely flyways and as parts of extended net lines or hoisting them into trees in canopy sets. We also deployed arrays of both live (Tomahawk-National and Sherman traps) and snap traps (Museum Special and Victor rat traps) set in alternation and with vegetable and animal baits. We also employed lines of pitfall traps strung with drift fences. Where permitted, we used shotguns (.410 caliber and 20-gauge) and several times documented animals recently collected by indigenous hunters. When identifications were firm, we also made sight records while checking traps or nets or while conducting bird counts.

Birds were primarily collected using mist nets 12 m long and set at ground level in forest habitat; nets were typically placed in lines of 4 to 10 nets running along trails. We occasionally set single nets in patchy habitats or second growth. Additional birds came opportunistically from nets set specifically for bats. Typically these nets were single nets (6 and 12 m) placed in openings. Most were at ground level, although a few nets at most camps were elevated 5 m or more above the ground. At some camps (Aguas Calientes, Suecia, Maskoitania, and Consuelo), we also collected birds with shotguns.

Observations of birds not collected at the camps came from daily forays from camp. Each day, Stotz and Pequeño left camp before dawn

FIG. 2. Participants of the 1999 Zoological Expeditions to Manu: (back) Douglas F. Stotz, Máximo Careche, Sergio Solari, Navidad Avendaño, Matthew D. Dean, John Chavez, Lucia Luna, José G. Tello, Jessica Amanzo; (front) Bruce D. Patterson, Christian Albujar, Thomas P. Gnoske, Tatiana Pequeño.

on roads or trails and returned to camp in early afternoon. Some days, they returned to the field for one to two hours in the late afternoon. Approximately half the days, they remained together in the field, and half the days they covered portions of the area separately. All observations were made within a 5 km radius of camp. The elevations spanned by these observations varied with local topography and is given with other site-specific information below. Included among these observations are a few species only observed by companions: José Tello in 1999 and Brian O'Shea in 2000 and 2001.

Although the collections we made will be the subject of separate studies, both descriptive and monographic, we include some characterizations of each site to detail the provenience of listed species. Coordinates for each of these sites are listed beyond in the Gazetteer.

Aguas Calientes—450 m, a camp on the left bank of the Río Alto Madre de Dios, 2.75 km E (downstream) from Shintuya. The name derives from geothermal springs that empty into the river near our camp, set in a clearing on the first terrace above the river. The camp lay at the foot of a 50-m slope leading up to various successions of lowland *terra firme* forest. Most sampling effort was concentrated on the forests of the upper terrace. Birds and larger mammals were observed from 500 to 650 m.

Maskoitania—480 m, an ecotourism camp on the left bank of the Río Alto Madre de Dios, about 13 km downstream from Atalaya. Our camp was 0.4 km from the landing beach, in a large grass-filled clearing surrounded by secondary lowland forest. Trails emanated from this site south along the river; west into thick, brushy, bamboo-filled forest; and to the northwest, where 3 km distant we encountered substantial glades of mature forest. Birds and mammals were observed from 450 to 500 m.

Consuelo—1000 m, a roadside camp set at the foot of a long ridge descending to the road from the WNW. Our lines and nets extended from the cloud forest at the crest of this ridge to the tropical riparian growth along the boulder-strewn Río Cosñipata far below the road. Several

FIG. 3. Participants of the 2001 Zoological Expeditions to Manu: (back) John Chavez, Carl W. Dick, Raul Cobos, Don Gettinger, Douglas F. Stotz, Bruce D. Patterson; (front) Máximo Careche, Sergio Solari, Ursula Paredes, Edith Suazo, Tatiana Pequeño, July Poma, Brian J. O'Shea.

glades of second-growth forest were sampled below the highway, and smaller patches of nearly pure bamboo were also trapped and netted. Observations of birds and mammals at this site spanned the 800- to 1200-m interval.

San Pedro—1450 m, an ecotourism lodge near the bridge by that name, along the road (near km marker 152). A large stream comes down from the west; several smaller creeks also feed into this. The slope is moderate, and small areas were flooded during our sampling. In the secondary forests of the area down the slope, the primary understory vegetation included thickets of *Chusquea*, which become monocultures in deforested regions. However, upslope, we sampled a relatively mature and humid forest, with large trees covered in epiphytes, and a dense understory composed of ferns, palms, and small trees also covered by mosses and epiphytes. Birds and larger mammals were observed from 1250 to 1700 m.

Suecia—1920 m, a place marked by a roadside restaurant called "El Rocotal," opposite a cleared slope blanketed by pepper plants. Collecting lines and transects in cloud forests at this elevation extended perhaps 150 m above the camp and as much as 120 m below it, following the courses of the road and tumbling river. The upper (and steep) part reached a flat patch of cloud forest with tall, medium-sized trees (60 cm dbh) and rocky ground. We traveled along the road for up to 2 km in each direction, looking for accessible patches of undisturbed cloud forests to sample with nets and lines; observations here spanned the 1800- to 1822-m range. We sampled along several creeks, one studded with large boulders and flanked by small epiphyte-covered trees, others smaller and bordered by bushes.

Pillahuata—2450 m, a small, old settlement along the road (near km marker 128) in a particularly steep region (slopes often above 50°); the area itself is severely affected by the road, which crosses those hills several times. Because of roadworks and the exposure, vegetation surrounding our camp was dryer than

typical forests at this elevation. Above Pillahuata, we sampled mammals in a mix of grassland and thorn scrubs; we also sampled in the forest around (through a few short trails); here the understory was open, with large trees covered with epiphytes and thick litter (20 cm). Birds and larger mammals were observed here from 2450 to 2700 m.

La Esperanza—2850 m, near a roadside restaurant and spring by that name. The region surrounding this camp marked an ecotone between mossy and elfin forests in mesic situations and more xeric ericaceous or chaparral-like brush on more open slopes. Certain trap and net lines followed the course of fast-flowing streams that eventually crossed the road, passing beneath bridges or culverts. Our observations of birds and larger mammals from this site ranged from 2750 to 2950 m.

Puesto de Vigilancia Acjanaco—3450 m, but also above (to 3550 m) in the *pajonal* near Abra Acjanaco or Cerro Macho Cruz, as well as below (to 3250 m) along Trocha Ericcson, a hiking trail from Puesto de Vigilancia Abra Acjanaco into the Manu Reserve. In the *pajonal*, the dominant vegetation is bunchgrasses (Poaceae) almost 1 m high, with a few sparse shrubs. Because of low slopes, high elevation and exposure, the climate is cold and wet and the vegetation open. Downslope, along Trocha Ericcson, mossy elfin forest blankets the steep, humid slopes of the narrow trail between elevations 3250 and 3350 m. Two small, almost dry creeks and one broad (50 m) landslide bisect this trail. To distinguish these two contrasting habitats, which were sampled from a single camp in our 1999 expedition, we have annotated specimen records from this site as PA and TE. Accordingly, records from our 1999 fieldwork at PA or TE appear boldfaced in Table 1. Bird and mammal observations along both the trail and the road ranged from 3100 to 3550 m.

For Tables 1 and 2, we compiled cumulative records of all mammals and birds documented in the Manu Biosphere Reserve. Most mammal records are documented by museum vouchers and are based on study (and in some cases restudy and reidentification) of specimens. As noted by Pacheco et al. (1993), most of these localities fall within the Cosñipata and Alto Madre de Dios drainages and the Cerros de Pantiacolla, with additional samples from Pakitza along the Río Manu; sight records and some vouchers document the fauna from Cocha Cashu. Bird sampling was concentrated in the same areas but strengthened along the lower reaches of the Ríos Madre de Dios and Manu. Besides records from recent expeditions, we drew on the work of Fitzpatrick, Stotz, and their colleagues between 1980 and 1985; numerous trips through the region by Walker beginning in the mid-1990s; and publications on birds at Cocha Cashu (Bolster & Robinson, 1990; Terborgh et al., 1984). Fitzpatrick and Walker obtained additional records from other observers, mainly leaders of tours for bird-watchers through the area. There are a small handful of records based on other collections made in the region by Blake or C. Kalinowski in the 1950s (housed at FMNH) and Whitely in the 1870s. Elevations for the records come from altimeters or GPS readings and are rounded to the nearest 50 m.

Gazetteer

Following are localities documenting the distribution of mammals in the Manu Biosphere Reserve (Fig. 4). Coordinates, given in decimal degrees south latitude and west longitude, were determined from several sources: various museum records (FMNH, MUSM, and MVZ); published literature sources (LIT), especially Stephens and Traylor (1983) and Wilson and Sandoval (1996); the National Imagery and Mapping Agency's online database of foreign geographic feature names (GNS)—this database is now the official repository of foreign placename decisions approved by the U.S. Board on Geographic Names (USBGN); 1:100,000 series maps from the Instituto Geográfico Militar (IGM) del Peru; and by direct determination (GPS). Following a description of the locality are acronyms denoting the disposition of voucher materials: **FMNH**, Field Museum of Natural History, Chicago, Illinois; **KU**, Natural History Museum, University of Kansas, Lawrence, Kansas; **MUSM**, Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru; **MVZ**, Museum of Vertebrate Zoology, University of California, Berkeley; and **USNM**, National Museum of Natural History, Washington, D.C.

AA . . . . . 13.1667 / 71.589 (MVZ)
Abra Acjanaco, 32 km NE (by road) Paucartambo, km 112 (also 32 km NNE [by road] Paucartambo; Quebrada cerca de Abra Acjanaco), 3140–3450 m (MVZ).

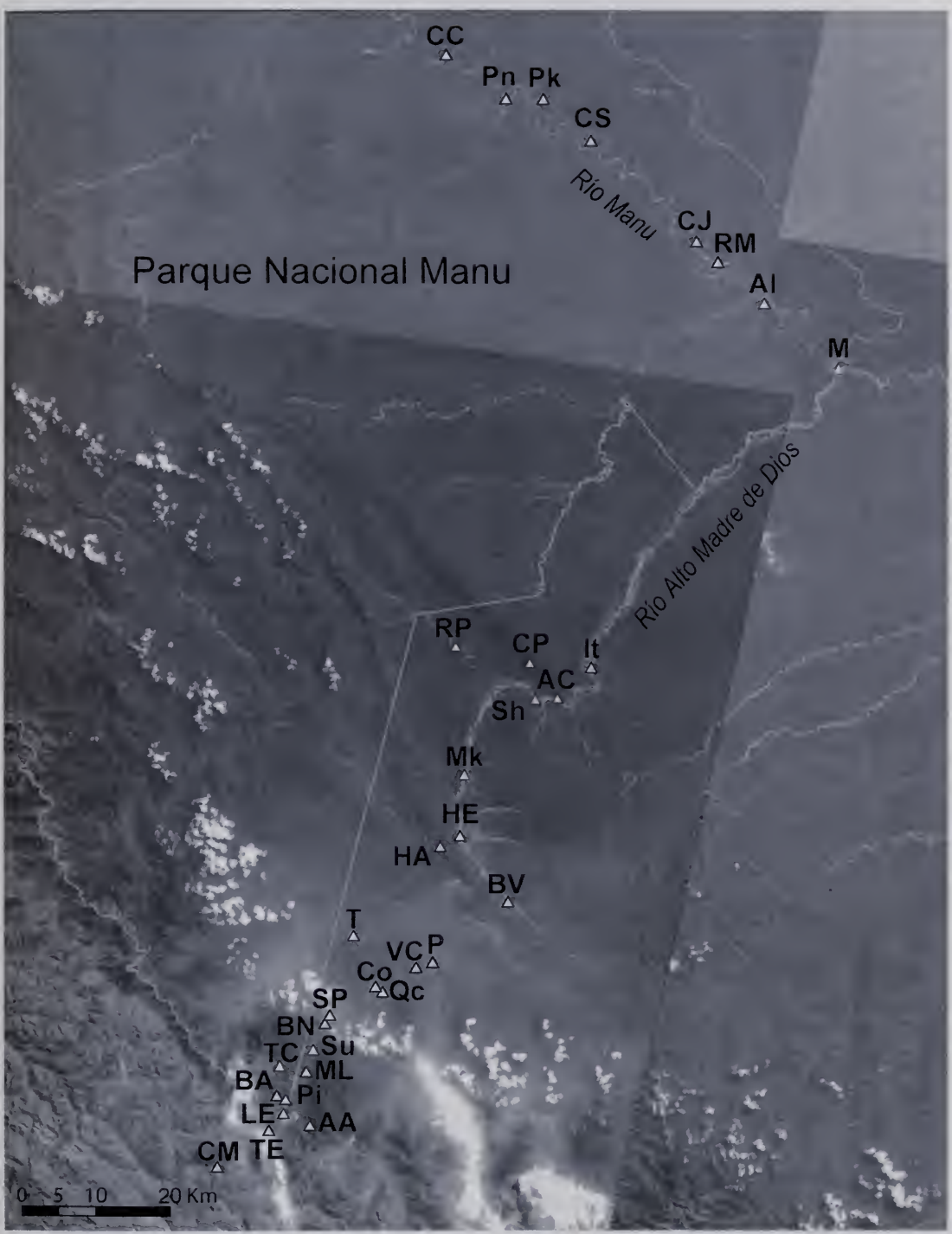

FIG. 4. Thirty-three localities sampled for small mammals and represented by codes in Table 1. Names and locations of these localities are given in the Gazetteer.

AC . . . . . 12.6683 / 71.269 (GPS)
Aguas Calientes, Río Alto Madre de Dios, ca. 1 km below Shintuya (also Quebrada Aguas Calientes, left bank, Río Alto Madre de Dios, 2.75 km E Shintuya), 450–520 m (FMNH, MUSM, MVZ).

Al . . . . . 12.1902 / 71.0184 (FMNH)
Altamira, 350–400 m (FMNH).

AM . . . . . .12.5833 / 71.25 (MUSM)
Alto Río Madre de Dios, 15 km below Shintuya, 420–430 m (FMNH, MUSM).

BA . . . . . .13.15 / 71.5911 (IGM)
Buenos Aires, carretera Paucartambo-Pilcopata, km 132, 2360 m (MUSM).

BN . . . . . 13.2273 / 71.6196 (MUSM)
Albergue Bosque de las Nubes (also Bosque de las Nubes, carretera Paucartambo-Pilcopata, km 150, Puente Union; Est. Biol. Bosque Nublado), 1480–1800 m (MUSM).

BV . . . . . .12.95 / 71.1333 (GNS)
Puerto Buena Vista (= El Carbon) 550 m (FMNH).

CC . . . . . 11.85 / 71.3166 (LIT)
Cocha Cashu Biological Station (also ca. 70 km NW mouth of Río Manu on Río Manu; Río Manu, 70 Airline km above Mouth, N Bank), 380 m (AMNH, MUSM, MVZ, USNM).

CJ . . . . . 12.0184 / 71.2147 (MUSM)
Cocha Juares (also Río Manu, 40 km up from mouth), 365 m (MUSM).

CM . . . . . .13.196 / 71.6197 (MUSM)
Cerro Macho Cruz, above Puesto de Vigilancia Abra Acjanaco, 3450 m (MUSM).

Cñ . . . . . .13.0667 / 71.1833 (LIT)
Cosñipata, 1000 m (FMNH).

Co . . . . . 13.0236 / 71.49185 (GPS)
Consuelo, 15.9 km SW Pilcopata (also Consuelo, km 165, 17 km by rd W of Pilcopata), 1000–1400 m (FMNH, MUSM).

CP . . . . . 12.5833 / 71.25 (LIT)
Cerro de Pantiacolla (also Cerro de Pantiacolla, above Río Palotoa; Cerro de Pantiacolla, E slope near summit), 900–1300 m (FMNH).

CS . . . . . 11.9930 / 71.2270 (MUSM)
Cocha Salvador (Río Manu, ca. 50 km from mouth; also Río Manu, Salvador), 370 m (FMNH, MUSM, USNM).

HA . . . . . 12.8773 / 71.3865 (FMNH)
Hacienda Amazonia (Alto Río Madre de Dios, Hacienda Amazonia; also Hacienda Amazonia, ridge above), 500–1050 m (FMNH, MUSM).

HE . . . . . .12.9 / 71.2 (MVZ)
Hacienda Erika, Río Alto Madre de Dios opposite Salvacion, 350–500 (MVZ).

It . . . . . .12.7833 / 71.2167 (LIT)
Itahuania, 450 m (FMNH, MUSM).

LE . . . . . 13.1777 / 71.6045 (GPS)
La Esperanza (39 km NE [by road] Paucartambo, km 119), 2850–3240 m (FMNH, MUSM, MVZ).

M . . . . . 12.25 / 70.9 (GNS)
Manu (Boca Río Manu, near Manu) 365 m (FMNH, MUSM, USNM).

Mk . . . . . 12.7717 / 71.3855 (GPS)
Maskoitania, 13.4 km NNW Atalaya, left bank Río Alto Madre de Dios, 480 m (FMNH, MUSM).

ML . . . . . .13.197 / 71.5767 (MUSM)
Morro Leguía, carretera Paucartambo-Pillcopata, km 135 (54 km NE [by road] Paucartambo, km 134), 2100–2250 m (MUSM, MVZ).

P . . . . . 12.9018 / 71.3742 (MUSM)
Pilcopata, Queros (also Pilcopata, Sabaluyo), 350 m (MUSM).

PA . . . . . 13.196 / 71.6197 (GPS)
Puesto de Vigilancia Acjanaco (Acjanaco; Challabamba, Puesto de Vigilancia Acjanaco; also Parque Nacional Manu, Puesto de Vigilancia Acjanaco), 3350–3500 m (FMNH, MUSM).

PB . . . . . .11.8385 / 71.3852 (LIT)
Playa Bonita, northern limit of Manu National Park (near border with Reserved Zone Alto Purus; 6–7 km N of Cocha Cashu), 350 m (Leite-Pitman et al., 2003).

Pi . . . . . 13.1622 / 71.5975 (GPS)
Pillahuata (48 km NE (by road) Paucartambo, km 128), 2460–2600 m (FMNH, MUSM, MVZ).

Pk . . . . . .11.9464 / 71.2833 (LIT)
Pakitza (Pakitza Control Post, 57 km above mouth of Río Manu; Pakitza, 40 km above mouth of Río Manu; Río Manu, Puesto de Vigilancia de Pakitza), 340–350 m (MUSM, USNM).

Qc . . . . . 12.9939 / 71.4540 (MUSM)
Quitacalzon, carretera Paucartambo-Pillcopata, puente, km 163, 1180 m (MUSM).

RP . . . . . 12.5767 / 71.4356 (FMNH)
Palotoa (Río Palotoa, left bank, 12 km upstream from mouth), 450–490 m (FMNH, MUSM).

Sh . . . . . .12.6833 / 71.25 (GNS)

Shintuya (Yanamayo [Shintuya]), 420–450 m (FMNH, MUSM).

SI . . . . . 13.0 / 71.3 (GNS) Santa Isabel, 4 km SW of; Río Cosñipata, 1700 m (KU).

SP. . . . . .13.05467 / 71.54623 (GPS) San Pedro (72 km NE [by road] Paucartambo, km 152), 1400–1550 m (FMNH, MUSM, MVZ).

Su. . . . . 13.1005 / 71.5675 (GPS) Suecia, Km 138.5 Carretera Shintuya, 1900–2100 m (FMNH, MUSM).

T . . . . . .13 / 71.1833 (GNS) Tono, 5 km S Río Tono and 18 road km W Patria, 800–950 m (FMNH, MUSM).

TC . . . . . 13.2 / 71.6333 (MVZ) Tres Cruces, 18 km N Paucartambo (20 km N [by road] Paucartambo, km 100), 3505–3625 m (MUSM, MVZ).

TE . . . . . .13.196 / 71.6197 (MUSM) Trocha Ericcson; (below) Puesto de Vigilancia Acjanaco, 3250–3350 m (FMNH, MUSM).

VC . . . . . 12.9018 / 71.3938 (MUSM) Hacienda Villa Carmen, 600 m (FMNH, MUSM).

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Mammals of the Manu Biosphere Reserve*

Sergio Solari,† Víctor Pacheco,‡ Lucía Luna,§ Paul M. Velazco,‖ and Bruce D. Patterson#

Mammals occurring in the Manu Biosphere Reserve. New additions to the faunal list are denoted by asterisks; common names not used by contributors to Wilson and Reeder (2005) are denoted by carets. Records documented during recent NSF-funded surveys of the reserve are in boldface, first listing those with museum vouchers, while sight, sound, or sign records appear in parentheses. Locality codes and their locations are listed in the Gazetteer and shown in Figure 4. Minimum and maximum elevations along the Manu transect are in meters.

	Common name	Localities	Min	Max
Didelphimorphia				
Didelphidae				
Caluromys lanatus	Brown-eared Woolly Opossum	VC (CC)	380	600
Caluromysiops irrupta	Black-shouldered Opossum	It (CC)	380	450
Chironectes minimus	Water Opossum	HE, Sh, VC (CC, Pk)	350	600
Didelphis marsupialis	Common Opossum	Al, **Co**, (CC, Pk, **SP**, **Su**)	400	1920
Glironia venusta	Bushy-tailed Opossum	(CC)	380	380
* *Gracilinanus aceramarcae*	Aceramarca Gracile Opossum	**LE**	2880	2880
Gracilinanus agilis[1]	Agile Gracile Opossum	Pk	350	350
Marmosa andersoni	Anderson's Mouse Opossum^[2]	VC	600	600
Marmosa quichua[3]	Quechuan Mouse Opossum	Pk, SI (CC)	350	1700
Marmosa rubra	Red Mouse Opossum	VC	600	600
Marmosops bishopi[4]	Bishop's Slender Opossum	**AC**, CC, Pk, VC	350	600
Marmosops impavidus	Tschudi's Slender Opossum	SP, VC	600	1460
Marmosops noctivagus	White-bellied Slender Opossum	Al, BN, CC, **Co**, HA, **Mk**, P, Pk, **SP**, **Su**	350	1920
Metachirus nudicaudatus	Brown Four-eyed Opossum	**AC**, CC, **Co**, HE, M, **Mk**, Pk, **SP**	350	1480
Micoureus regina	Bare-tailed Woolly Mouse Opossum	Al, CC, **Co**, HA, It, **Mk**, Pk	400	1050
Monodelphis emiliae	Emilia's Short-tailed Opossum	CC	380	380
Monodelphis glirina[5]	Amazonian Red-sided Opossum	CC, Pk	350	380
Monodelphis peruviana[6]	Peruvian Short-tailed Opossum^	HA, **Pi**, SP, **Su**	825	2460
* *Monodelphis ronaldi*[7]	Pine's Short-tailed Opossum^	Pk	350	350
Philander opossum	Gray Four-eyed Opossum	**AC**, HE, Pk (CC)	350	500

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† Doctoral Candidate, Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409-3131, U.S.A.

‡ Curator and Professor, Departamento de Mamíferos, Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Apartado Postal 14-0434, Lima 14, Perú.

§ Doctoral Candidate, Museum of Zoology, University of Michigan, Ann Arbor, MI 48109, U.S.A.

‖ Doctoral Candidate, Department of Biological Sciences, University of Illinois at Chicago, Chicago, IL 60607, U.S.A.

MacArthur Curator of Mammals, Department of Zoology, The Field Museum, Chicago, IL 60605-2496, U.S.A.

Continued.

	Common name	Localities	Min	Max
Paucituberculata				
Caenolestidae				
Lestoros inca	Incan Shrew Opossum	AA, **LE**, ML, **Pi**, SP, TE	2190	3350
Cingulata				
Dasypodidae				
Dasypus novemcinctus	Nine-banded Armadillo	VC (CC, **Co**)	380	1000
Priodontes maximus	Giant Armadillo	(CC)	380	380
Pilosa				
Bradypodidae				
Bradypus variegatus	Brown-throated Sloth	(**AC**, CC, Pk)	350	500
Megalonychidae				
Choloepus hoffmanni	Hoffmann's Two-toed Sloth	HA (Pk)	350	500
Cyclopedidae[8]				
Cyclopes didactylus	Silky Anteater	(CC)	380	380
Myrmecophagidae				
Myrmecophaga tridactyla	Giant Anteater	(CC, Pk)	350	380
Tamandua tetradactyla	Southern Tamandua	(CC, Pk)	350	380
Primates[9]				
Cebidae				
Callimico goeldii	Goeldi's Marmoset	Al (CC)	380	400
Callithrix pygmaea	Pygmy Marmoset	(CC, Pk)	350	380
Cebus albifrons (*cuscinus*)	White-fronted Capuchin	Al (CC, Pk)	350	400
Cebus apella (*peruanus*)	Tufted Capuchin	Al, It (**AC**, CC, **Co**, **Mk**, Pk, **SP**)	350	1460
Saguinus fuscicollis	Brown-mantled Tamarin	**AC**, It (CC, Pk)	350	450
Saguinus imperator	Emperor Tamarin	Al, It (CC, Pk)	350	400
* *Saguinus mystax*[10]	Black-chested Mustached Tamarin	PB	350	350
Saimiri boliviensis (*peruviensis*)	Black-capped Squirrel Monkey	**AC**, Al, It (CC, **Mk**, Pk)	350	450
Aotidae				
Aotus nigriceps	Black-headed Night Monkey	**AC**, Al, HE, VC (CC, **Co**, **Mk**, Pk, **SP**)	350	1550
Pitheciidae				
Callicebus brunneus	Brown Titi	**AC**, Al, It (CC, Pk)	350	450
Pithecia irrorata	Gray Monk Saki[11]	Al (CC)	380	400
Atelidae				
Alouatta sara	Bolivian Red Howler	It (CC, **Mk**, Pk)	350	450
Ateles chamek[12]	Peruvian Spider Monkey	It (CC, Pk)	350	450
Lagothrix cana (*tschudii*)	Gray Woolly Monkey	CS, P, **Su** (CC, **Co**, ML, Pk, **SP**)	350	2150
Lagomorpha				
Leporidae				
Sylvilagus brasiliensis	Tapeti	**AC**, **Co**, **Mk**, P, VC (CC, Pk)	350	1000
Chiroptera				
Emballonuridae				
Cormura brevirostris	Chestnut Sac-winged Bat	HA	680	680
Peropteryx kappleri	Greater Dog-like Bat	VC	600	600
* *Peropteryx leucoptera*	White-winged Dog-like Bat	**AC**	450	450
Rhynchonycteris naso	Proboscis Bat	Pk (CC)	350	380
Saccopteryx bilineata	Greater Sac-winged Bat	**Mk**, Pk	350	480
Saccopteryx leptura	Lesser Sac-winged Bat	**AC**, P	350	450
Phyllostomidae				
Anoura caudifer	Tailed Tailless Bat	**AC**, **Co**, CP, HA, HE, **Mk**, Pk, SP, **Su**, T	340	1920
Anoura cultrata	Handley's Tailless Bat	CP, **Su**	975	1920

Continued.

	Common name	Localities	Min	Max
Anoura geoffroyi	Geoffroy's Tailless Bat	Co, CP, HA, LE, Pi, Su, T, TE	780	3350
Anoura sp. nov.[13]	Andean Tailless Bat^	LE, Pi, TE	2450	3320
Artibeus lituratus	Great Fruit-eating Bat	AC, Co, HA, HE, Mk, Pk, RP, T (CC)	340	1000
Artibeus obscurus	Dark Fruit-eating Bat	AC, CJ, Co, CP, CS, HA, HE, Mk, Pk, RP, T (CC)	340	1030
Artibeus planirostris[14]	Flat-faced Fruit-eating Bat^	AC, Co, CS, HA, HE, M, Mk, Pk (CC)	340	1050
Carollia benkeithi[15]	Southern Chesnut Short-tailed Bat	AC, AM, CJ, Co, CS, HA, M, Mk, Pk, RP, Sh, T (CC)	340	1000
Carollia brevicauda	Silky Short-tailed Bat	AC, AM, BN, CJ, Co, CP, CS, HA, M, Mk, P, Pk, Qc, RP, SP, T (CC)	340	1700
Carollia manu[16]	Manu Short-tailed Bat^	BN, CP, ML, SP	1300	2250
Carollia perspicillata	Seba's Short-tailed Bat	AC, AM, CC, CJ, Co, CP, CS, HA, M, Mk, P, Pk, RP, Sh, T	340	1300
Chiroderma salvini	Salvin's Big-eyed Bat	AC, Co, HA, Mk, Su, T	450	1920
Chiroderma trinitatum	Little Big-eyed Bat	AC, CC, Co, HA, Mk, Pk, T	340	1000
Chiroderma villosum	Hairy Big-eyed Bat	AC, CC, CS, HA, Mk, Pk, T	340	950
Choeroniscus minor	Lesser Long-tailed Bat	HA, Mk, Pk	340	825
Chrotopterus auritus	Woolly False Vampire Bat	AC, HA (CC)	380	520
Dermanura anderseni[17]	Andersen's Fruit-eating Bat	AC, AM, CC, Co, HA, HE, Mk, Pk, RP, Sh	340	1000
Dermanura glauca	Silvery Fruit-eating Bat	AC, BN, Co, CP, HA, Mk, ML, Pi, Qc, SP, Su, T, TE (CC?)	450	3350
Dermanura gnoma	Dwarf Fruit-eating Bat	AC, HA, Mk, Pk	340	680
Desmodus rotundus	Common Vampire Bat	HA, HE, Mk, Pk	340	680
Diphylla ecaudata	Hairy-legged Vampire Bat	CP, HE, Pk	350	900
Enchisthenes hartii	Velvety Fruit-eating Bat	AC, BN, Co, CP, HA, Mk, Pi, Qc, Su, SP, T	450	2600
Glossophaga commissarisi	Commissaris's Long-tongued Bat	Pk	350	350
Glossophaga soricina	Pallas's Long-tongued Bat	HA, HE, Pk	340	950
Glyphonycteris daviesi	Graybeard Bat	Pk	350	350
Lampronycteris brachyotis	Orange-throated Bat	(CJ)	365	365
Lichonycteris obscura	Dark Long-tongued Bat	Pk	350	350
Lionycteris spurrelli	Chestnut Long-tongued Bat	AC, CP, HA, Mk	450	1050
* *Lonchophylla handleyi*	Handley's Nectar Bat	AC	450	450
Lonchophylla thomasi	Thomas's Nectar Bat	AC, CC, Co, HA, HE, Mk, P, Pk, RP	350	1300
* *Lonchorhina aurita*	Common Sword-nosed Bat	Co, Mk	480	1000
Lophostoma brasiliense[18]	Pygmy Round-eared Bat	HE, Pk, RP	340	500
* *Lophostoma carrikeri*	Carriker's Round-eared Bat	Mk	480	480
Lophostoma silvicolum[19]	White-throated Round-eared Bat	AC, CP, Co, HA, HE, It, M, Pk	350	1000
Macrophyllum macrophyllum	Long-legged Bat	Pk	340	340
Mesophylla macconnelli	MacConnell's Bat	AC, Al, CC, Co, HA, Pk, T	340	1300
Micronycteris hirsuta	Hairy Big-eared Bat	AC, RP	490	520
Micronycteris megalotis	Little Big-eared Bat	Co, HA, Mk, Pk, Pi, RP	350	2600
Micronycteris minuta	Tiny Big-eared Bat	HA, Mk, Pk	350	500
Micronycteris schmidtorum	Schmidts' Big-eared Bat^[20]	HA, Pk, RP	350	680
Mimon crenulatum	Striped Hairy-nosed Bat	Co, HA, Pk	350	1400
Phylloderma stenops	Pale-faced Bat	AC, Co, Pk (CC)	350	1200
Phyllostomus elongatus	Lesser Spear-nosed Bat	AC, Co, CS, HA, HE, M, Mk, Pk, Qc, T (CC)	340	1180

Continued.

	Common name	Localities	Min	Max
Phyllostomus hastatus	Greater Spear-nosed Bat	AC, BV, **Co**, HA, HE, It, **Mk**, Pk, RP (CC)	340	1000
* *Platyrrhinus albericoi*[21]	Alberico's Broad-nosed Bat	**Pi**, **SP**, **Su**	1480	2460
Platyrrhinus brachycephalus	Short-headed Broad-nosed Bat	**AC**, Co, HA, HE, **Mk**, Pk, RP, T (CC?)	350	1000
Platyrrhinus helleri	Heller's Broad-nosed Bat	**AC**, CC, **Co**, HA, HE, **Mk**, Pk, RP, T	350	1400
Platyrrhinus infuscus	Buffy Broad-nosed Bat	**AC**, **Co**, CP, HA, HE, It, **Mk**, Pk, RP, T	340	1300
Platyrrhinus masu[22]	Quechuan Broad-nosed Bat	**Co**, CP, HA, HE, **LE**, **Pi**, Qc, **SP**, **Su**, **TE**	350	3350
Platyrrhinus nigellus[23]	Blackish Broad-nosed Bat	AC, BN, **Co**, CP, HA, Qc, RP, **SP**, T	460	1700
Rhinophylla pumilio	Dwarf Little Fruit Bat	**AC**, HA, HE, **Mk**, Pk	350	825
Sphaeronycteris toxophyllum	Visored Bat	(CC)	380	380
Sturnira erythromos	Hairy Yellow-shouldered Bat	AA, BN, HA, **LE**, ML, **Pi**, **SP**, **Su**, **TE**	1050	3450
Sturnira lilium	Little Yellow-shouldered Bat	**AC**, **Co**, HA, HE, **Mk**, Pk, Qc, RP, **SP**, T	350	1500
Sturnira magna	Greater Yellow-shouldered Bat	AC, **Co**, CP, HA, HE, SP, **Su**, T	350	1920
Sturnira oporaphilum	Tschudi's Yellow-shouldered Bat	BN, **Co**, CP, HA, **SP**, T	500	1700
Sturnira tildae	Tilda's Yellow-shouldered Bat	**AC**, HA, **Mk**, Pk	340	780
Tonatia saurophila	Stripe-headed Round-eared Bat	CP, HA, Pk (CC)	380	1030
Trachops cirrhosus	Fringe-lipped Bat	**AC**, CP, CS, HE, M, **Mk**, Pk (CC)	340	975
Uroderma bilobatum	Common Tent-making Bat	**AC**, **Co**, CP, HA, HE, **Mk**, Pk, RP, T (CC)	340	1050
Uroderma magnirostrum	Brown Tent-making Bat	**AC**, CC, **Mk**, Pk	340	520
Vampyressa melissa	Melissa's Yellow-eared Bat	BN, **Co**, Qc, SP	1000	1700
Vampyressa thyone[24]	Northern Little Yellow-eared Bat	**AC**, **Co**, HA, Pk, T (CC)	350	1000
Vampyriscus bidens[25]	Bidentate Yellow-eared Bat	**AC**, CP, CS, HA, Pk, T	350	1050
Vampyrodes caraccioli	Great Stripe-faced Bat	**AC**, **Co**, CP, HA, **Mk**, Pk	340	1050
Vampyrum spectrum	Spectral Bat	HA (CC)	380	820
Noctilionidae				
Noctilio albiventris	Lesser Bulldog Bat	**Mk**, Pk (CC)	340	480
Noctilio leporinus	Greater Bulldog Bat	Pk	350	350
Furipteridae				
Furipterus horrens	Thumbless Bat	HA, Pk, T	350	900
Thyropteridae				
* *Thyroptera lavali*	LaVal's Disk-winged Bat	**Mk**	480	480
Thyroptera tricolor	Spix's Disk-winged Bat	HA, Pk (CC)	340	680
Molossidae				
Molossus molossus	Pallas's Mastiff Bat	HA, HE, Pk, Sh, T	350	950
* *Molossus rufus*	Black Mastiff Bat	**Co**	1000	1000
Nyctinomops laticaudatus	Broad-eared Free-tailed Bat	Pk	350	350
* *Tadarida brasiliensis*	Brazilian Free-tailed Bat	**Pi**	2460	2600
Vespertilionidae				
Eptesicus brasiliensis	Brazilian Brown Bat	**LE**, Pi, **Su**	1900	2880
* *Eptesicus chiriquinus*	Chiriquinan Serotine	**Co**, **Mk**	480	1000
Eptesicus furinalis	Argentinian Brown Bat	ML, T	900	2250
* *Lasiurus blossevillii*	Red Bat	**Pi**	2460	2460
Lasiurus ega	Southern Yellow Bat	Pk	350	350
Myotis albescens	Silver-tipped Myotis	**AC**, HE, **Mk**, Pk	340	480
Myotis keaysi	Hairy-legged Myotis	**AC**, HA, **Mk**, Pi, **SP**, **Su**, TE	450	3450
Myotis nigricans	Black Myotis	**AC**, **Co**, HA, **Mk**, Pk, RP, T, VC (CC)	350	1050
* *Myotis oxyotus*	Montane Myotis	**LE**, Pi	2600	3170

Continued.

	Common name	Localities	Min	Max
Myotis riparius	Riparian Myotis	**AC**, **Co**, HA, HE, **Mk**, Pk, **SP**	350	1480
Myotis simus	Velvety Myotis	Pk	350	350
Carnivora				
Felidae				
Leopardus pardalis	Ocelot	**AC**, Al, M (CC, HE, Pk)	350	450
* *Leopardus tigrinus*[26]	Oncilla	(**SP**)	1460	1460
Leopardus wiedii	Margay	Al, CS (CC)	370	400
Panthera onca	Jaguar	Cñ (CC, HE, Pk)	350	1000
Puma concolor	Cougar	(CC, CM, Pk, **Su**)	350	3450
Puma yagouaroundi	Jaguarundi	(**Mk**, ML, Pk)	350	2200
Canidae				
Atelocynus microtis	Short-eared Dog	**AC**, Al (CC)	380	450
Lycalopex culpaeus	Culpeo	(CM, **PA**)	3450	3450
* *Speothos venaticus*[27]	Bush Dog	(CC)	380	380
Ursidae				
Tremarctos ornatus	Spectacled Bear	(BN, CM, ML, Pi, **Su**)	1920	3450
Mustelidae				
Eira barbara	Tayra	(CC, **Mk**, Pk, **Su**)	350	1920
Galictis vittata	Greater Grison	(CC)	380	380
Lontra longicaudis	Neotropical Otter	Al (CC, **Co**, Pk, **Mk**)	350	1000
* *Mustela africana*[28]	Amazon Weasel	(CC)	380	380
Mustela frenata	Long-tailed Weasel	TE	3350	3350
Pteronura brasiliensis	Giant Otter	Al (CC, Pk)	350	400
Mephitidae				
Conepatus chinga	Molina's Hog-nosed Skunk	PA (CM, **LE**, Pi)	2520	3450
Procyonidae				
Bassaricyon alleni[29]	Allen's Olingo	(CC)	380	380
Nasua nasua	South American Coati	Al (CC, **Co**, **Mk**, Pk, **SP**)	350	1450
Potos flavus	Kinkajou	**AC**, **Co**, It (CC, Mk Pk, **SP**)	350	1460
Procyon cancrivorus	Crab-eating Raccoon	(CC, **Co**, **Mk**)	380	1000
Perissodactyla				
Tapiridae				
Tapirus terrestris	South American Tapir	(**AC**, CC, **Co**, **Mk**, Pk)	350	1000
Artiodactyla				
Tayassuidae				
Pecari tajacu	Collared Peccary	**AC** (CC, Pk)	350	450
Tayassu pecari	White-lipped Peccary	**Mk** (CC, Pk)	350	480
Cervidae				
Blastoceros dichotomus[30]	Marsh Deer	(Pk)	350	350
Mazama americana	South American Red Brocket	**Mk** (CC, Pk)	350	480
Mazama chunyi	Dwarf Brocket	(Pi, TE)	2450	3300
Mazama gouazoubira	South American Brown Brocket	(CC)	380	380
Odocoileus peruvianus[31]	Peruvian White-tailed Deer^	**LE**, PA (CM)	2880	3450
Rodentia				
Sciuridae				
Microsciurus flaviventer	Amazon Dwarf Squirrel	**AC**, Al, Co, CP, HA, It (CC)	380	1000
Sciurus ignitus	Bolivian Squirrel	Al, M, VC (Pk)	350	600
Sciurus igniventris	Northern Amazon Red Squirrel	HA (VC)	600	850
Sciurus sanborni[32]	Sanborn's Squirrel	Al, M	350	400
Sciurus spadiceus	Southern Amazon Red Squirrel	**AC**, M, VC (CC, Pk)	350	600
* *Sciurus* sp.[33]	[Red Squirrel—possibly new]	(**Su**)	1920	1920
Cricetidae[34]				
Akodon aerosus	Yungas Akodont	BN, **Co**, ML, **SP**, **Su**	1000	2250
Akodon subfuscus	Puno Akodont	AA, CM, **LE**, **PA**, Pi, **Su**	1900	3450
Akodon torques	Cloud Forest Akodont	AA, CM, **LE**, ML, **PA**, **Pi**, **Su**, TC, **TE**	2190	3625

Continued.

	Common name	Localities	Min	Max
Holochilus sciureus	Amazonian Marsh Rat	CC, M	365	380
Microryzomys minutus	Montane Colilargo	AA, **LE**, **PA**, **Pi**, SP, **Su**, TC, **TE**	1900	3625
* *Neacomys tumsseri*	Musser's Neacomys	**AC**, **SP**	450	1460
Neacomys spinosus	Common Neacomys	CC, **Co**, HE, **Mk**, Pk, SP, VC	340	1480
* *Neacomys* sp. nov.[35]	[New Neacomys]	**SP**, **Su**	1480	2100
Nectomys garleppii[36]	Garleppi's Water Rat	**AC**, **Co**, HA, Pk, **SP**, VC (CC)	340	1500
Neusticomys peruvieusis[37]	Peruvian Ichthyomyine	**AC**, Pk	340	450
Oecomys bicolor	White-bellied Oecomys	**AC**, Al, CC, **Co**, HA, Pk	340	1000
Oecomys phaeotis	Dusky Oecomys	BN, **SP**, **Su**, VC	600	1920
Oecomys roberti	Robert's Oecomys	CC, **Co**, It, Pk	350	1000
Oecomys superans	Large Oecomys	CC, HE, Pk	340	500
* *Oecomys trinitatis*[38]	Long-furred Oecomys	CC	380	380
* *Oligoryzomys andinus*[39]	Andean Colilargo	**SP**, **Pi**, **PA?**	1480	3450
* *Oligoryzomys destructor*	Tschudi's Colilargo	LE, **Pi**, SP, **Su**	1480	2880
Oligoryzomys microtis	Small-eared Colilargo	**AC**, CC, **Co**, HA, M, **Mk**, P, Pk, Sh, **Su**, VC	340	1900
Oligoryzomys sp. B[40]	Colilargo species B	AA, CM, **LE**, **PA**	2850	3450
Oryzomys keaysi	Keays' Oryzomys	BN, **Co**, ML, Pi, Qc, **SP**, **Su**	1000	2460
Oryzomys levipes	Nimble-footed Oryzomys	AA, BN, **LE**, ML, **Pi**, SP, **Su**	1700	3140
Oryzomys macconnelli	MacConnell's Oryzomys	**AC**, CC	380	450
Oryzomys nitidus	Elegant Oryzomys	CC, **Co**, CP, HA, **Mk**, Pk, RP	340	1030
Oryzomys perenensis	Western Amazonian Oryzomys	**AC**, Al, CC, **Co**, CS, HA, HE, It, M, **Mk**, Pk, RP, VC	340	1400
* *Oryzomys yunganus*[41]	Amazonian Oryzomys	CC	380	380
* *Oryzomys* sp. nov.[42]	[New Rice Rat]	**Pi**	2460	2460
Oxymycterus inca	Inca Hocicudo	**Co**, **Mk**, P, **SP**, VC	350	1480
Oxymycterus paramensis	Yungas Hocicudo	CM, **PA**	3350	3450
Phyllotis osilae	Bunchgrass Pericote	**PA**	3450	3450
* *Rhagomys longilingua*[43]	Long-tongued Rhagomys	**Mk**, **Su**	480	1920
Rhipidomys gardneri[44]	Gardner's Rhipidomys	Pk, SP (CC)	350	1480
* *Thomasomys daphne*	Daphne's Thomasomys	AA, **LE**, **Pi**, **TE**	2460	3450
Thomasomys notatus	Dusky-footed Thomasomys	**Pi**, SP, **Su**	1460	2460
Thomasomys sp. nov.[45]	Golden Thomasomys	AA, BA, **LE**, ML, **Pi**, SP, **Su**, TE	1460	3420
Thomasomys sp. nov.[46]	Montane Thomasomys	AA, **LE**, **Su**, TC, **TE**	1900	3505
Erethizontidae				
Coendou bicolor	Bicolor-spined Porcupine	**AC** (CC, Pk)	350	480
Dinomyidae				
Dinomys branickii	Pacarana	CC, **Co**	380	1000
Caviidae				
Cavia tschudii	Montane Guinea Pig	**PA**	3450	3450
Hydrochoeridae				
Hydrochoerus hydrochaeris	Capybara	Al (CC, Pk)	350	400
Dasyproctidae				
Dasyprocta variegata[47]	Brown Agouti	Al, M (CC, **Co**, Pk)	350	1000
Myoprocta pratti	Green Acouchy	Al, CC (Pk)	350	400
Cuniculidae				
Cuniculus paca	Lowland Paca	**AC**, **Co** (CC, Pk)	350	1000
Cuniculus taczanowskii	Mountain Paca	BN, PA, **Su**, TE (Pi, **LE**)	1920	3450
Echimyidae				
* *Dactylomys boliviensis*	Bolivian Bamboo Rat	**Co**, **Mk** (CC, Pk, **SP**)	480	1450
Dactylomys dactylinus	Amazon Bamboo Rat	**T**	850	900
* *Isothrix* sp. nov.[48]	[New Brush-tailed Rat]	**Su**	1900	1930

Continued.

	Common name	Localities	Min	Max
Mesomys hispidus	Ferreira's Spiny Tree Rat	CC, Pk	340	380
Pattonomys occasius[49]	Bare-tailed Armored Tree Rat	(CC)	380	380
Proechimys brevicauda	Short-tailed Spiny-Rat	CC, Pk	350	380
Proechimys pattoni[50]	Patton's Spiny-Rat	**Mk**, Pk	340	480
Proechimys simonsi	Simons' Spiny-Rat	**AC**, **Co**, HE, It, M, Mk, Pk, Qc, VC	340	1180
Proechimys steerei	Steere's Spiny-Rat	CC, It, M, Pk	340	450

Total Species recorded to date: 222 Species

Taxonomic notes

[1] Recent work (Costa et al., 2003) shows that *Gracilinanus agilis* occurs primarily in the Cerrado, so this could actually be *G. buenavistae* or *G. peruana* (see Voss et al., 2005).

[2] In keeping with other honorific names for mouse opossums, the common name for this species has been changed from that in Gardner (2005).

[3] Voss et al. (2001) recognized it as a valid species from western Amazonia, different from *M. murina* which is apparently restricted to the Guyanas. Its type locality (Ocobamba, Cuzco) is close to MBR.

[4] Previously listed by Pacheco et al. (1993) as *Marmosops parvidens* but distinguished from that form by Voss et al. (2001).

[5] Previously listed by Pacheco et al. (1993) as *Monodelphis brevicaudata*, this follows the usage of Voss et al. (2001).

[6] Recognition of *Monodelphis peruviana* as specifically different from *M. adusta*, previously listed by Pacheco et al. (1993), follows unpublished analyses by Solari.

[7] This new species of short-tailed opossum was described by Solari (2004) from a specimen taken at Pakitza.

[8] Allocation of the silky anteater to a family of its own follows reappraisals of its distinctions by McKenna and Bell (1997), Gaudin and Branham (1998), and Delsuc et al. (2002).

[9] Substantial changes in the higher-level classification of Primates reflect ongoing phylogenetic studies—many informed by molecular sequence analyses—and the reclassifications of Rylands et al. (2000) and Groves (2001).

[10] This new record for the MBR is based on a sight record by Leite-Pitman et al. (2003) from Playa Bonita, at the northern border of Manu National Park.

[11] In view of its broad distribution outside the Rio Tapajóz drainage, the more descriptive name used in Wilson and Cole (2000) and in various governmental listings is employed here.

[12] Collins and Dubach (2000) demonstrated the distinction of *Ateles chamek* from *A. paniscus*, placing it closer to *A. belzebuth*.

[13] This high-elevation species is being described by V. Pacheco, S. Solari, and R. Cadenillas.

[14] Simmons (2005) listed *planirostris* as a synonym of *A. jamaicensis*, but Lim et al. (2004) showed that the two are distinct and not each other's sisters, recovering the relationships ((((*obscurus* + *planirostris*) + *amplus*) + (*lituratus* + *intermedius*)) + *jamaicensis*).

[15] Formerly listed as *Carollia castanea*, this new species was described by Solari and Baker (2006).

[16] This new species from southeastern Peru and northern Bolivia was described by Pacheco et al. (2004) from specimens collected in the Cosñipata Valley.

[17] Many authorities have treated *Dermanura*, *Koopmania*, and *Enchisthenes* as subgenera of an inclusive *Artibeus*. None disputes the monophyly of these taxa (*Koopmania* and *Enchisthenes* are monotypic) or the monophyly of an *Artibeus-Koopmania-Dermanura* clade. We follow Van Den Bussche et al. (1998) in according generic status to both *Dermanura* and *Enchisthenes*. Although *D. cinerea* had been included in earlier checklists of Manu (e.g., Pacheco et al., 1993), Solari and coworkers (in prep.) restrict this species to northern South America. Specimens formerly listed as *D. cinerea* instead represent *D. anderseni*.

[18] Use of *Lophostoma* instead of *Tonatia* for these species follows Lee et al. (2002).

[19] This usage follows Simmons (2005), who employed the name that d'Orbigny and Gervais associated with the text description ("*silvicolum*"), not the revised plate associated with it ("*sylvicolum*").

[20] The etymology of this scientific name was in honor of brothers Frank and Karl Schmidt; the common name is accordingly amended here to reflect its plural character.

[21] This large, brightly striped species represents the southern member of what was formerly known as *P. vittatus*; it was described by Velazco (2005) from specimens collected during the recent transect.

Continued.

[22] This montane-forest species was formerly reported as *P. dorsalis* but corresponds to a new species described by Velazco (2005) from transect-collected specimens.

[23] This species was formerly reported as *P. lineatus* (Pacheco et al., 1993) and is treated as a synonym of that species by Simmons (2005). Distinction of *P. nigellus* from *P. lineatus* follows Velazco and Solari (2003) and is supported by phylogenetic analyses of Velazco (2005).

[24] This species was distinguished from *Vampyressa pusilla*, as this species had been previously listed (Pacheco et al., 1993), by the molecular analyses of Lim et al. (2003).

[25] Porter and Baker (2004) have shown that *Vampyressa* s.l. is paraphyletic—*M. macconnelli* is sister to a group of species (including *melissa*, *thyone*, and *pusilla*) properly called *Vampyressa*, but a second group of species is basal to that clade. Accordingly, they allocated *brocki* and *bidens* to the genus *Vampyriscus* and separate *Mesophylla* from the Central American *Ectophylla*, where it sometimes has been placed.

[26] During our field survey at San Pedro (2000), Roland Kays identified this small spotted cat over a bamboo field near our camp.

[27] New MBR record based on a sight record and tracks from Cocha Cashu, by Leite-Pitman et al. (2003).

[28] This new record for MBR is based on track records at Cocha Cashu by Leite-Pitman et al. (2003).

[29] Use of *Bassaricyon alleni* for Peruvian populations of olingo (in place of *B. gabbii* as this record was previously listed) follows Wozencraft (2005).

[30] For purposes of their meta-analysis, Voss and Emmons (1996) excluded Pacheco and Vivar's (1996) record of swamp deer from their list of forest animals of Cocha Cashu and Pakitza, believing it to be a savanna transient. However, there is no question concerning the accuracy or authenticity of the record.

[31] Recognition of Peruvian white-tailed deer as the distinct species *Odocoileus peruvianus* follows the provisional treatment of Molina and Molinari (1999).

[32] Recognized as a valid species by Thorington and Hoffmann (2005); however, its status was early questioned by Voss and Emmons (1996).

[33] On two occasions during our camp at Suecia, different parties observed a small reddish-brown squirrel obviously larger than *Microsciurus* yet decidedly smaller than *Sciurus igniventris* or *S. spadiceus*. It appeared less reddish and more brown than *S. pyrrhinus* from the Huallaga drainage but may be related to that form.

[34] Inclusion of the subfamily Sigmodontinae in Cricetidae instead of Muridae follows Steppan et al. (2004) and Musser and Carleton (2005).

[35] This species is being described by Luna and Patterson.

[36] Amazonian *Nectomys* are distinguished from *Nectomys squamipes* of the Atlantic Forest by their chromosomes (Bonvicino et al., 1996). Species limits in Amazonian water rats, especially *N. apicalis* and *N. garleppii*, need further investigation (Patton et al. 2000). With a type locality in Ocobamba, Cuzco, the name *garleppii* certainly applies to Manu populations, whether or not it proves to be distinct from *apicalis*.

[37] Pending further study, the two ichthyomyine records for MBR are listed as a single species.

[38] New record based on specimens from Cocha Cashu reported by Leite-Pitman et al. (2003).

[39] This seems to be the best name for this small and grayish "colilargo," which occurs within the geographic and altitudinal range described by Carleton and Musser (1989).

[40] This undescribed species is identified by the same name it was designated in Carleton and Musser's (1989) revision of *Microryzomys*. The awkwardness of this nomenclature and the abundance, ubiquity, and ecological roles of colilargos as agricultural pests and reservoirs for disease vectors warrant renewed attention to revisions of this group.

[41] New record based on specimens from Cocha Cashu reported by Leite-Pitman et al. (2003).

[42] Patterson and Luna are evaluating the distinctions of this species.

[43] This distinctive mouse was described by Luna and Patterson (2003) in the enigmatic sigmodontine genus *Rhagomys*, hitherto known only from coastal Brazil (see also Percequillo et al., 2004). Its relationships to other sigmodontines are assessed in D'Elia et al. (2006), who relate it to the Andean endemics *Aepeomys* and *Thomasomys* as well as the widespread genus *Rhipidomys*.

[44] This species was listed by Terborgh et al. (1984) and Pacheco et al. (1993) as *Rhipidomys leucodactylus* but represents the distinct species *R. gardneri* for reasons discussed by Patton et al. (2000).

[45] This new species, denoted *Thomasomys* sp. 1 in Pacheco (2003), is a member of the *aureus* group and was earlier listed by Pacheco et al. (1993) as that species.

[46] This new species, denoted *Thomasomys* sp. 9 in Pacheco (2003), is a member of the *oreas* group and was earlier listed by Pacheco et al. (1993) as that species. Also includes a specimen from Tres Cruces previously listed as *T. gracilis*.

[47] Usually called *Dasyprocta punctata*, both the scientific and common names for the smaller agouti follow Emmons and Feer (1997).

[48] This crested cloud forest rodent was pictured in Patterson (2002) and is being described by Patterson and Velazco.

[49] This species was previously recognized and listed as an *Echimys*; its removal from that genus is justified by Emmons (1993) and Patton et al. (2000). This new genus has recently been erected by Emmons (2005).

[50] This species was previously listed as *Proechimys* sp. nov. (Pacheco et al., 1993) and was subsequently described by da Silva (1998).

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Birds of the Manu Biosphere Reserve*

Barry Walker,† Douglas F. Stotz,‡ Tatiana Pequeño,§ and John W. Fitzpatrick‖

Birds known from Manu Biosphere Reserve#, including records with vouchers or sight, sound, or sign records (localities in parentheses). Taxonomy, nomenclature, English names, and sequence follow Remsen et al. (2006), except as noted. Elevational range is given in meters. Localities for records documented during recent NSF-funded surveys of the reserve are presented with those supported by museum vouchers in bold, with sight and sound records appearing in normal font. Codes for seasonal status are R, Resident; B, Boreal Migrant; A, Austral Migrant; V, Vagrant. Documentation is encoded with s, Specimen (an asterisk indicates that a specimen collected during 1999–2001 expeditions was the first specimen for the MBR); r, Recording; p, Photograph; [blank], heard or seen only.

		Elevational range (m)	Seasonal status	Localities	Documentation
Tinamiformes					
Tinamidae					
Gray Tinamou	*Tinamus tao*	250–1300	R	Mk, AC, Co	s
Black Tinamou	*Tinamus osgoodi*	900–1350	R		s
Great Tinamou	*Tinamus major*	250–700	R	Mk, AC	s
White-throated Tinamou	*Tinamus guttatus*	250–1100	R	Mk, AC, Co	r
Hooded Tinamou	*Nothocercus nigrocapillus*	1600–3200	R	SP, Su, Pi, LE, AA	r
Cinereous Tinamou	*Crypturellus cinereus*	250–1000	R	Mk, **AC**, Co	s
Little Tinamou	*Crypturellus soui*	250–1500	R	Mk, **AC**, Co	s
Brown Tinamou	*Crypturellus obsoletus*	450–2200	R	Mk, AC, Co, SP, Su, Pi, LE, AA	s
Undulated Tinamou	*Crypturellus undulatus*	250–800	R	Mk, AC	s
Brazilian Tinamou	*Crypturellus strigulosus*	350	R		r
Black-capped Tinamou	*Crypturellus atrocapillus*	250–1000	R	**Mk**, AC, Co	s
Variegated Tinamou	*Crypturellus variegatus*	250–500	R	AC	s
Bartlett's Tinamou	*Crypturellus bartletti*	250–450	R	AC	s
Taczanowski's Tinamou	*Nothoprocta taczanowskii*	3200	R		
Andean Tinamou	*Nothoprocta pentlandii*	2600–4000	R		

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† Director, Manu Expeditions, P.O. Box 606, Cusco, Perú.

‡ Conservation Ecologist, Environmental and Conservation Programs, The Field Museum, 1400 South Lake Shore Drive, Chicago, IL 60605-2496, U.S.A.

§ Biólogo, Calle Federico Gerdes 141, San Miguel, Lima, Perú.

‖ Director, Cornell Laboratory of Ornithology, Cornell University, 159 Sapsucker Woods Road, Ithaca, NY 14850, U.S.A.

Previously published lists of birds from Manu National Park that were consulted in preparing this list are Terborgh et al, (1984), Karr et al. (1990), Servat (1995), and Walker (1998).

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Anseriformes					
Anhimidae					
Horned Screamer	*Anhima cornuta*	250–500	R		p
Anatidae					
Fulvous Whistling-Duck	*Dendrocygna bicolor*	300	V		
Black-bellied Whistling Duck	*Dendrocygna autumnalis*	600	V		
Andean Goose	*Chloephaga melanoptera*	3800	R		
Orinoco Goose	*Neochen jubata*	250–500	R		p
Muscovy Duck	*Cairina moschata*	250–500	R		p
Torrent Duck	*Merganetta armata*	1400–2200	R	SP. Su	
Crested Duck	*Lophonetta specularioides*	3450	R	AA	
Speckled Teal	*Anas flavirostris*	3500	R	AA	
Yellow-billed Pintail	*Anas georgica*	3200	R		
Blue-winged Teal	*Anas discors*	350	V		
Rosy-billed Pochard[1]	*Netta peposaca*	350	V		p
Masked Duck	*Nomonyx dominica*	250–500	R		
Galliformes					
Cracidae					
Speckled Chachalaca	*Ortalis guttata*	250–1600	R	Mk. AC. Co. SP	s
Andean Guan	*Penelope montagnii*	900–3200	R	Co. SP. Su. Pi. LE. AA	s
Spix's Guan	*Penelope jacquacu*	250–1500	R	Mk. AC. Co	s*
Blue-throated Piping-Guan	*Pipile cumanensis*	250–500	R	Mk	p
Wattled Guan	*Aburria aburri*	650–1600	R	SP. Su	s
Sickle-winged Guan	*Chamaepetes goudotii*	2800	R		
Razor-billed Curassow	*Mitu tuberosum*	250–1000	R	Mk. Co	s
Odontophoridae					
Rufous-breasted Wood-Quail	*Odontophorus speciosus*	1000–2100	R	Co. SP. Su. Pi	s*
Stripe-faced Wood-Quail	*Odontophorus balliviani*	800–3100	R	LE. AA	r
Starred Wood-Quail	*Odontophorus stellatus*	250–1050	R	Mk. AC	s
Podicipediformes					
Podicipedidae					
Least Grebe	*Tachybaptus dominicus*	250–500	R		p
Silvery Grebe	*Podiceps occipitalis*	250	V		
Pelecaniformes					
Phalacrocoracidae					
Neotropic Cormorant	*Phalacrocorax brasilianus*	250–3600	R	Mk. AC. Co	p
Anhingidae					
Anhinga	*Anhinga anhinga*	250–500	R		p
Ciconiiformes					
Ardeidae					
Rufescent Tiger-Heron	*Tigrisoma lineatum*	250–600	R	Mk	s
Fasciated Tiger-Heron	*Tigrisoma fasciatum*	400–1600	R	Mk. AC. Co. Su	s
Agami Heron	*Agamia agami*	250–500	R		p
Boat-billed Heron	*Cochlearius cochlearius*	250–500	R	AC	s
Zigzag Heron	*Zebrilus undulatus*	250–500	R		
Stripe-backed Bittern	*Ixobrychus involucris*	300	V		p
Least Bittern	*Ixobrychus exilis*	250–500	R		
Black-crowned Night-Heron	*Nycticorax nycticorax*	250–500	R	Mk. AC	

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Striated Heron	*Butorides striata*	250–800	R		s
Cattle Egret	*Bubulcus ibis*	250–1500	R	Mk	
Cocoi Heron	*Ardea cocoi*	250–500	R	Mk, AC	s
Great Egret	*Ardea alba*	250–500	R	Mk, AC	p
Capped Heron	*Pilherodius pileatus*	250–500	R	Mk, AC	p
Snowy Egret	*Egretta thula*	250–500	R	Mk, AC	
Little Blue Heron	*Egretta caerulea*	250–600	R	Mk	
Threskiornithidae					
Puna Ibis	*Plegadis ridgwayi*	(450) 3400–3500	R		
Green Ibis	*Mesembrinibis cayennensis*	250–500	R		p
Black-faced Ibis	*Theristicus melanopis*	3500	R		
Roseate Spoonbill	*Platalea ajaja*	250–500	R		
Ciconiidae					
Jabiru	*Jabiru mycteria*	250–500	R		p
Wood Stork	*Mycteria americana*	250–500	R		
Cathartidae					
Turkey Vulture	*Cathartes aura*	250–2700	R	Mk, AC, Co, SP	s
Greater Yellow-headed Vulture	*Cathartes melambrotus*	250–1100	R	Mk, AC, Co	p
Black Vulture	*Coragyps atratus*	250–1300	R	Mk, AC, Co	
King Vulture	*Sarcoramphus papa*	250–900	R	Mk, AC	
Andean Condor	*Vultur gryphus*	3500	R		
Phoenicopteriformes					
Phoenicopteridae					
Puna Flamingo	*Phoenicoparrus jamesi*	350	V		p
Falconiformes					
Accipitridae					
Osprey	*Pandion haliaetus*	250–500	B		
Gray-headed Kite	*Leptodon cayanensis*	250–600	R	AC	
Hook-billed Kite	*Chondrohierax uncinatus*	250–2000	R	Mk, SP	
Swallow-tailed Kite	*Elanoides forficatus*	250–2000	R	**Mk**, AC, **Co**, SP	
Pearl Kite	*Gampsonyx swainsonii*	250–500	R		
Snail Kite	*Rostrhamus sociabilis*	250–500	R		
Slender-billed Kite	*Rostrhamus hamatus*	250–500	R		
Double-toothed Kite	*Harpagus bidentatus*	250–1350	R	Mk, AC, Co, SP	s
Mississippi Kite	*Ictinia mississippiensis*	250–500	B		
Plumbeous Kite	*Ictinia plumbea*	250–1450	R	Mk, AC, Co, SP	s
Cinereous Harrier	*Circus cinereus*	2900–4000	R	LE	
Long-winged Harrier	*Circus buffoni*	300	V		
Gray-bellied Hawk	*Accipiter poliogaster*	250–500	R		
Tiny Hawk	*Accipiter superciliosus*	250–500	R	Mk, **AC**	s
Semicollared Hawk	*Accipiter collaris*	1100–2500	R	SP	
Sharp-shinned Hawk	*Accipiter striatus*	900–3500	R	Co, SP, Su, Pi, LE, AA	s
Bicolored Hawk	*Accipiter bicolor*	250–1300	R		s
Crane Hawk	*Geranospiza caerulescens*	250–500	R		
Slate-colored Hawk	*Leucopternis schistacea*	250–500	R		
White-browed Hawk	*Leucopternis kuhli*	250–500	R		
White Hawk	*Leucopternis albicollis*	500–1500	R	Mk	
Gray Hawk	*Asturina nitida*	250–1200	R		
Great Black-Hawk	*Buteogallus urubitinga*	250–500	R	Mk, AC	p
Solitary Eagle	*Harpyhaliaetus solitarius*	700–2100	R	Co, SP, Su	
Black-collared Hawk	*Busarellus nigricollis*	250–500	R	Mk	p

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Black-chested Buzzard-Eagle	*Geranoaetus melanoleucus*	2600–4000	R		
Roadside Hawk	*Buteo magnirostris*	250–2500	R	Mk, AC, Co, SP	s
Broad-winged Hawk	*Buteo platypterus*	250–3000	B	LE	
White-rumped Hawk	*Buteo leucorrhous*	1400–3500	R		
Short-tailed Hawk	*Buteo brachyurus*	250–1100	R	AC	
White-throated Hawk	*Buteo albigula*	1500–3400	R	Su	
Swainson's Hawk	*Buteo swainsoni*	250–650	B		
Red-backed Hawk	*Buteo polyosoma*	2000–3500	R	Su, AA	s
Puna Hawk	*Buteo poecilochrous*	3500–3800	R		
Zone-tailed Hawk	*Buteo albonotatus*	250–500	R		
Crested Eagle	*Morphnus guianensis*	250–850	R		
Harpy Eagle	*Harpia harpyja*	250–500	R		
Black-and-white Hawk-Eagle	*Spizastur melanoleucus*	250–1300	R		
Black Hawk-Eagle	*Spizaetus tyrannus*	250–1100	R	Mk, AC	
Ornate Hawk-Eagle	*Spizaetus ornatus*	250–1100	R	AC	s
Black-and-chestnut Eagle	*Oroaetus isidori*	900–3600	R	SP, Pi, LE	
Falconidae					
Black Caracara	*Daptrius ater*	250–600	R	Mk, AC	s
Red-throated Caracara	*Ibycter americanus*	250–1250	R	Mk, AC. Co, SP	r
Mountain Caracara	*Phalcoboenus megalopterus*	2850–3500	R	LE, AA	
Southern Caracara	*Polyborus plancus*	450	V		
Yellow-headed Caracara	*Milvago chimachima*	350	V		
Laughing Falcon	*Herpetotheres cachinnans*	250–1000	R	Mk, AC, Co	s
Barred Forest-Falcon	*Micrastur ruficollis*	250–2000	R	**Mk**, AC, **Co**, SP, Su	s
Lined Forest-Falcon	*Micrastur gilvicollis*	250–1000	R	Mk, Co	s
Slaty-backed Forest-Falcon	*Micrastur mirandollei*	250–500	R		r
Collared Forest-Falcon	*Micrastur semitorquatus*	250–1200	R	SP	r
Buckley's Forest-Falcon	*Micrastur buckleyi*	250–600	R	Mk	s
American Kestrel	*Falco sparverius*	2200–3500	R	Su	
Bat Falcon	*Falco rufigularis*	250–1500	R	Mk, AC	r
Orange-breasted Falcon	*Falco deiroleucus*	250–750	R		
Aplomado Falcon	*Falco femoralis*	2500–3500	R	AA	
Peregrine Falcon	*Falco peregrinus*	350–3000	R	Pi	
Gruiformes					
Aramidae					
Limpkin	*Aramus guarauna*	250–500	R		p
Psophiidae					
Pale-winged Trumpeter	*Psophia leucoptera*	250–1050	R	AC	s
Rallidae					
Gray-necked Wood-Rail	*Aramides cajanea*	250–1450	R	Mk, AC, Co, SP	s
Uniform Crake	*Amaurolimnas concolor*	250–1000	R	Mk, Co	r
Black-banded Crake	*Anurolimnas fasciatus*	500	R	Mk	
Rufous-sided Crake	*Laterallus melanophaius*	250–800	R	Mk, Co	s
Gray-breasted Crake	*Laterallus exilis*	250–600	R		r
Spotted Rail	*Pardirallus maculatus*	250–500	V		
Blackish Rail	*Pardirallus nigricans*	250–600	R		r
Common Moorhen	*Gallinula chloropus*	300	R		
Purple Gallinule	*Porphyrio martinica*	250–500	R	Mk	s
Azure Gallinule	*Porphyrio flavirostris*	250–300	A		
Heliornithidae					
Sungrebe	*Heliornis fulica*	250–500	R		s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Charadriiformes					
Eurypygidae					
Sunbittern	*Eurypyga helias*	250–1600	R	Mk, **AC**, Co, SP	s
Jacanidae					
Wattled Jacana	*Jacana jacana*	250–300	R		p
Himantopidae					
Black-necked Stilt	*Himantopus mexicanus*	250–1000	V		
Charadriidae					
Pied Lapwing	*Vanellus cayanus*	250–500	R		s
Andean Lapwing	*Vanellus resplendens*	3500	R		
American Golden-Plover	*Pluvialis dominica*	250–2000	B		
Black-bellied Plover	*Pluvialis squatarola*	350–500	B		
Collared Plover	*Charadrius collaris*	250–500	R	Mk	s
Scolopacidae					
Puna Snipe	*Gallinago andina*	2700–4000	R		s
Andean Snipe	*Gallinago jamesoni*	2700–3550	R	Pi, LE	r
Short-billed Dowitcher	*Limnodromus griseus*	300	V		
Upland Sandpiper	*Bartramia longicauda*	250–500	B		s
Greater Yellowlegs	*Tringa melanoleuca*	250–2850	B	Mk, AC, LE	s
Lesser Yellowlegs	*Tringa flavipes*	250–600	B	AC	
Solitary Sandpiper	*Tringa solitaria*	250–3450	B	Mk, AC, **AA**	s
Spotted Sandpiper	*Actitis macularius*	250–3500	B	**Mk**, AC, **Co**, SP, **AA**	s
Ruddy Turnstone	*Arenaria interpres*	450–500	B		
Sanderling	*Calidris alba*	250–500	B		
Least Sandpiper	*Calidris minutilla*	300	V		
White-rumped Sandpiper	*Calidris fuscicollis*	250–3450	B	AA	s
Baird's Sandpiper	*Calidris bairdii*	250–3450	B		
Pectoral Sandpiper	*Calidris melanotos*	250–500	B		s
Stilt Sandpiper	*Calidris himantopus*	250–500	B		
Buff-breasted Sandpiper	*Tryngites subruficollis*	250–500	B		
Wilson's Phalarope	*Phalaropus tricolor*	250–3450	B	AA	p
Laridae					
Andean Gull	*Larus serranus*	(300) 3300–3500	R	AA	
Franklin's Gull	*Larus pipixcan*	350	V		
Arctic Tern	*Sterna paradisaea*	350	V		p
Yellow-billed Tern	*Sterna superciliaris*	250–500	R	Mk, AC	p
Black Tern	*Chlidonias niger*	600	V		
Large-billed Tern	*Phaetusa simplex*	250–500	R	Mk, AC	p
Black Skimmer	*Rynchops niger*	250–500	R		p
Columbiformes					
Columbidae					
Ruddy Ground-Dove	*Columbina talpacoti*	250–700	R		
Picui Ground-Dove	*Columbina picui*	250–500	R		s
Blue Ground-Dove	*Claravis pretiosa*	250–600	R		
Maroon-chested Ground-Dove	*Claravis mondetoura*	1900–2500	R	**Su**, LE	s*
Bare-faced Ground-Dove	*Metriopelia ceciliae*	2000–2200	R	Su	
Spot-winged Pigeon	*Patagioenas maculosa*	3500–4000	R		
Band-tailed Pigeon	*Patagioenas fasciata*	1200–3500	R	**Su**, Pi, LE, AA	s
Pale-vented Pigeon	*Patagioenas cayennensis*	250–900	R	Mk, AC, Co	r
Plumbeous Pigeon	*Patagioenas plumbea*	250–1800	R	Mk, **AC**, Co, SP	s
Ruddy Pigeon	*Patagioenas subvinacea*	250–1550	R	Mk, AC, Co, SP	s
Eared Dove	*Zenaida auriculata*	(250) 3000–3300	R		
Gray-fronted Dove	*Leptotila rufaxilla*	250–1250	R	**Mk**, **AC**, Co, SP	s
Sapphire Quail-Dove	*Geotrygon saphirina*	600–1000	R	Co	

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
White-throated Quail-Dove	*Geotrygon frenata*	700–2850	R	**Co**, SP, Su, LE	s
Ruddy Quail-Dove	*Geotrygon montana*	250–1200	R	Mk, AC, Co	s
Psittaciformes					
Psittacidae					
Blue-and-yellow Macaw	*Ara ararauna*	250–1000	R	Mk, AC	p
Military Macaw	*Ara militaris*	600–1500	R	Co	
Scarlet Macaw	*Ara macao*	250–1000	R	Mk, AC	p
Red-and-green Macaw	*Ara chloropterus*	250–1050	R	Mk, AC	p
Chestnut-fronted Macaw	*Ara severus*	250–1200	R	Mk, AC, Co	s
Red-bellied Macaw	*Orthopsittaca manilata*	250–650	R	AC	
Blue-headed Macaw	*Primolius couloni*	250–1300	R	Mk, AC, Co	s
Mitred Parakeet	*Aratinga mitrata*	2000–3200	R	AA	
White-eyed Parakeet	*Aratinga leucophthalma*	250–1650	R	Mk, AC, Co, SP	s
Dusky-headed Parakeet	*Aratinga weddellii*	250–700	R	Mk, AC	s
Golden-plumed Parakeet	*Leptosittaca branickii*	2500–3250	R		r
Painted Parakeet	*Pyrrhura picta*	250–1000	R	Mk, **AC**	s
Rock Parakeet	*Pyrrhura rupicola*	250–1100	R	AC	s
Barred Parakeet	*Bolborhynchus lineola*	1100–2550	R	Co, SP, Su, Pi	
Andean Parakeet	*Bolborhynchus orbygnesius*	2500–3500	R	LE	
Dusky-billed Parrotlet	*Forpus sclateri*	250–500	R	Mk, AC	r
Cobalt-winged Parakeet	*Brotogeris cyanoptera*	250–500	R	Mk, AC	s
Tui Parakeet	*Brotogeris sanctithomae*	250–500	R		
Amazonian Parrotlet	*Nannopsittaca dachilleae*	250–1050	R	Mk, AC	r
Scarlet-shouldered Parrotlet	*Touit huetii*	300–1300	R		s
White-bellied Parrot	*Pionites leucogaster*	250–500	R	Mk, AC	s
Orange-cheeked Parrot	*Pionopsitta barrabandi*	250–500	R	Mk, AC	p
Blue-headed Parrot	*Pionus menstruus*	250–1250	R	Mk, AC, Co	s
Speckle-faced Parrot	*Pionus tumultuosus*	1100–3000	R	SP, **Su**, Pi, LE, AA	s*
Yellow-crowned Parrot	*Amazona ochrocephala*	250–850	R	Mk, AC	s
Scaly-naped Parrot	*Amazona mercenaria*	1100–3100	R	Co, SP, Su, Pi, LE, AA	r
Mealy Parrot	*Amazona farinosa*	250–1200	R	Mk, AC, Co	s
Opisthocomiformes					
Opisthocomidae					
Hoatzin	*Opisthocomus hoazin*	250–500	R		s
Cuculiformes					
Cuculidae					
Ash-colored Cuckoo	*Coccyzus cinereus*	250–600	A	Mk	
Black-billed Cuckoo	*Coccyzus erythropthalmus*	250–500	B	AC	s
Yellow-billed Cuckoo	*Coccyzus americanus*	250–1000	B	Co	s
Dark-billed Cuckoo	*Coccyzus melacoryphus*	250–700	R	Mk	
Squirrel Cuckoo	*Piaya cayana*	250–2800	R	Mk, **AC**, **Co**, SP, Su, Pi	s
Black-bellied Cuckoo	*Piaya melanogaster*	250–900	R	Mk, **AC**	s*
Little Cuckoo	*Piaya minuta*	250–600	R	Mk	s
Greater Ani	*Crotophaga major*	250–500	R		p
Smooth-billed Ani	*Crotophaga ani*	250–800	R	**Mk**, AC, Co	s
Striped Cuckoo	*Tapera naevia*	250–500	R		
Pheasant Cuckoo	*Dromococcyx phasianellus*	250–1000	R	Mk	r

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Pavonine Cuckoo	*Dromococcyx pavoninus*	250–900	R		r
Rufous-vented Ground-Cuckoo	*Neomorphus geoffroyi*	250–700	R		p
Strigiformes					
Tytonidae					
Barn Owl	*Tyto alba*	500–3500	R	Pi, AA	
Strigidae					
Tropical Screech-Owl	*Megascops choliba*	250–500	R	AC	
Rufescent Screech-Owl	*Megascops ingens*	1000–2100	R	Co, SP, **Su**	s
Tawny-bellied Screech-Owl	*Megascops watsonii*	250–600	R	Mk, **AC**	s
Vermiculated Screech-Owl	*Megascops guatemalae*	600–1600	R	Co	s
White-throated Screech-Owl	*Megascops albogularis*	2500–3250	R	LE	s*
Crested Owl	*Lophostrix cristata*	250–700	R		s
Spectacled Owl	*Pulsatrix perspicillata*	250–600	R	AC	r
Band-bellied Owl	*Pulsatrix melanota*	650–1400	R	Co	r
Great Horned Owl	*Bubo virginianus*	3400–3500	R		
Mottled Owl	*Ciccaba virgata*	250–1050	R	Mk, Co	s
Black-banded Owl	*Ciccaba huhula*	250–500	R		r
Rufous-banded Owl	*Ciccaba albitarsis*	1900–3200	R	Su, **Pi**, LE	s*
Yungas Pygmy-Owl	*Glaucidium bolivianum*	1500–3500	R	Su, **Pi**, LE	s
Subtropical Pygmy-Owl	*Glaucidium parkeri*	1000	R		r
Amazonian Pygmy-Owl	*Glaucidium hardyi*	250–1150	R	Mk	r
Ferruginous Pygmy-Owl	*Glaucidium brasilianum*	250–1000	R		s
Burrowing Owl	*Athene cunicularia* (500)	1900–3500	R	Su	
Striped Owl	*Pseudoscops clamator*	300	R		
Caprimulgiformes					
Steatornithidae					
Oilbird	*Steatornis caripensis*	450–800	R	AC	s*
Nyctibiidae					
Great Potoo	*Nyctibius grandis*	250–600	R	Mk, AC	r
Long-tailed Potoo	*Nyctibius aethereus*	250–500	R	Mk, **AC**	s*
Gray Potoo	*Nyctibius griseus*	250–500	R	Mk, AC, Co	r
Andean Potoo	*Nyctibius maculosus*	1400–2800	R	Pi	r/p
Caprimulgidae					
Short-tailed Nighthawk	*Lurocalis semitorquatus*	250–500	R	AC	
Rufous-bellied Nighthawk	*Lurocalis rufiventris*	1500–3450	R	SP, Su, LE, AA	
Sand-colored Nighthawk	*Chordeiles rupestris*	250–500	R	Mk	s
Common Nighthawk	*Chordeiles minor*	300	B		
Pauraque	*Nyctidromus albicollis*	250–800	R	Mk, AC	s
Ocellated Poorwill	*Nyctiphrynus ocellatus*	250–1000	R	Mk, AC	s
Silky-tailed Nightjar	*Caprimulgus sericocaudatus*	250–350	R		r
Band-winged Nightjar	*Caprimulgus longirostris*	1700–3500	R	Pi	s*
Blackish Nightjar	*Caprimulgus nigrescens*	600–1200	R		r
Ladder-tailed Nightjar	*Hydropsalis climacocerca*	250–500	R	Mk	s
Scissor-tailed Nightjar	*Hydropsalis torquata*	250–1700	R		s
Swallow-tailed Nightjar	*Uropsalis segmentata*	2000–3500	R	**Pi**, LE, AA	s*
Lyre-tailed Nightjar	*Uropsalis lyra*	1300–2800	R	SP, LE	s
Apodiformes					
Apodidae					
White-chinned Swift	*Cypseloides cryptus*	600–1950	R	SU	s*

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
White-chested Swift	*Cypselodes lemosi*	350–900	R		
Chestnut-collared Swift	*Streptoprocne rutila*	250–3000	R	Mk, AC, Co, SP, **SU**, Pi, **LE**	s
White-collared Swift	*Streptoprocne zonaris*	250–4000	R	Mk, AC, Co, SP, SU, LE, AA	s
Gray-rumped Swift	*Chaetura cinereiventris*	250–1450	R	Mk, AC, Co, SP	s
Pale-rumped Swift	*Chaetura egregia*	250–1600	R	Mk, Co	s
Chimney Swift	*Chaetura pelagica*	250–500	B		
Amazonian Swift	*Chaetura viridipennis*	500–600	R		
Short-tailed Swift	*Chaetura brachyura*	250–1000	R	Mk, Co	
White-tipped Swift	*Aeronautes montivagus*	1800–3000	R		
Andean Swift	*Aeronautes andecolus*	2800–3500	R		
Fork-tailed Palm-Swift	*Tachornis squamata*	250–800	R		
Lesser Swallow-tailed Swift	*Panyptila cayennensis*	250–800	R	Mk	
Trochilidae					
Buff-tailed Sicklebill	*Eutoxeres condamini*	450–1950	R	**Mk**, **AC**, **Co**, **SP**, **SU**	s
Rufous-breasted Hermit	*Glaucis hirsutus*	250–1000	R	**Mk**, **AC**, Co	s
Pale-tailed Barbthroat	*Threnetes leucurus*	250–1200	R	Mk, AC, Co	s
Reddish Hermit[2]	*Phaethornis ruber*	250–1400	R	MK, AC, Co	s
White-browed Hermit	*Phaethornis stuarti*	450	R		s
White-bearded Hermit	*Phaethornis hispidus*	250–1400	R	**Mk**, **AC**, **Co**, SP	s
Green Hermit	*Phaethornis guy*	550–1600	R	Co, SP	s
Koepcke's Hermit	*Phaethornis koepckeae*	500–1300	R	Mk, AC	s
Needle-billed Hermit	*Phaethornis philippii*	250–500	R		s
Great-billed Hermit	*Phaethornis malaris*	250–1350	R	**Mk**, **AC**, **Co**, SP	s
Blue-fronted Lancebill	*Doryfera johannae*	500–1000	R		p
Green-fronted Lancebill	*Doryfera ludovicae*	800–1900	R	**Co**, SP, **Su**	s
Gray-breasted Sabrewing	*Campylopterus largipennis*	250–1300	R	Mk, AC, Co	s
White-necked Jacobin	*Florisuga mellivora*	250–1200	R	Mk, **AC**, Co	s
Brown Violet-ear	*Colibri delphinae*	800–1700	R		s
Green Violet-ear	*Colibri thalassinus*	1000–2850	R	Co, SP, **Su**, **Pi**, LE	s
Sparkling Violet-ear	*Colibri coruscans*	400–3500	R	Mk, **AC**, **Co**, SP, Su, **LE**, AA	s
Black-throated Mango	*Anthracothorax nigricollis*	250–800	R	Mk	
Violet-headed Hummingbird	*Klais guimeti*	500–1000	R		s
Rufous-crested Coquette	*Lophornis delattrei*	500–1900	R	Su	p
Festive Coquette	*Lophornis chalybeus*	250–400	R		p
Wire-crested Thorntail	*Discosura popelairii*	500–1500	R	Co	p
Black-bellied Thorntail	*Discosura langsdorffi*	250	R		
Blue-chinned Sapphire	*Chlorestes notata*	500–900	R	Co	
Blue-tailed Emerald	*Chlorostilbon mellisugus*	250–900	R	AC, Co	
Fork-tailed Woodnymph	*Thalurania furcata*	250–1400	R	**Mk**, **AC**, **Co**, SP	s
Rufous-throated Sapphire	*Hylocharis sapphirina*	500	R		
White-chinned Sapphire	*Hylocharis cyanus*	250–500	R		
Golden-tailed Sapphire	*Chrysuronia oenone*	250–1550	R	**Mk**, **AC**, **Co**, SP	s
Many-spotted Hummingbird	*Taphrospilus hypostictus*	750–1500	R	Co	s
White-bellied Hummingbird	*Amazilia chionogaster*	1100–3400	R		s
Green-and-white Hummingbird	*Amazilia viridicauda*	1500–2500	R	SP	
Sapphire-spangled Emerald	*Amazilia lactea*	250–1400	R	**Mk**, SP	s*
Speckled Hummingbird	*Adelomyia melanogenys*	1000–2800	R	Co, **SP**, **Su**, **Pi**, LE	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Peruvian Piedtail	*Phlogophilus harterti*	750–1500	R	**Co**	s
Rufous-webbed Brilliant	*Heliodoxa branickii*	650–1400	R		s
Black-throated Brilliant	*Heliodoxa schreibersii*	600–1250	R		s
Gould's Jewelfront	*Heliodoxa aurescens*	250–1050	R	Mk, **AC**, **Co**	s
Fawn-breasted Brilliant	*Helidoxia rubinoides*	1500–2200	R	SP, **Su**	s*
Violet-fronted Brilliant	*Heliodoxa leadbeateri*	900–2000	R	Co, **SP**, **Su**	s
Chestnut-breasted Coronet	*Boissonneaua matthewsii*	1900–2900	R	**Su**, **Pi**, LE	s
Shining Sunbeam	*Aglaeactis cupripennis*	2500–3350	R	Pi, **LE**, **AA**	S*
White-tufted Sunbeam	*Aglaeactis castelnaudii*	2500–3500	R		
Andean Hillstar	*Oreotrochilus estella*	3000–3500	R		
Mountain Velvetbreast	*Lafresnaya lafresnaya*	2000–3200	R	LE	S*
Bronzy Inca	*Coeligena coeligena*	1000–2400	R	Co, **SP**, **Su**, Pi	s
Collared Inca	*Coeligena torquata*	2000–3000	R	Pi, LE	s
Violet-throated Starfrontlet	*Coeligena violifer*	1900–3350	R	Su, Pi, LE, AA	s
Sword-billed Hummingbird	*Ensifera ensifera*	2500–3500	R	Pi, **LE**, AA	s*
Great Sapphirewing	*Pterophanes cyanopterus*	2600–3500	R	Pi, LE, **AA**	s*
Giant Hummingbird	*Patagona gigas*	3400–3500	R	AA	
Amethyst-throated Sunangel	*Heliangelus amethysticollis*	1950–3500	R	Su, **Pi**, **LE**, **AA**	s
Sapphire-vented Puffleg	*Eriocnemis luciani*	2400–3450	R	Pi, AA	s
Buff-thighed Puffleg	*Haplophaedia assimilis*	1500–2200	R	SP, **Su**	s
Booted Racket-tail	*Ocreatus underwoodii*	1000–1850	R	Co, SP, Su	s
Green-tailed Trainbearer	*Lesbia nuna*	3000–3500	R		
Purple-backed Thornbill	*Ramphomicron microrhynchum*	2500–3500	R		
Tyrian Metaltail	*Metallura tyrianthina*	1900–3500	R	Su, **Pi**, **LE**, **AA**	s
Scaled Metaltail	*Metallura aeneocauda*	2750–3500	R	Pi	
Rufous-capped Thornbill	*Chalcostigma ruficeps*	1800–2700	R	Su, **Pi**, **LE**	s
Long-tailed Sylph	*Aglaiocercus kingi*	1200–2200	R	SP, **Su**	s
Wedge-billed Hummingbird	*Schistes geoffroyi*	800–1900	R	Co, **SP**	s
Black-eared Fairy	*Heliothryx aurita*	250–1100	R	Mk, AC, Co	s
Long-billed Starthroat	*Heliomaster longirostris*	250–600	R	Mk, AC	
Amethyst Woodstar	*Calliphlox amethystina*	250–800	R	Co	p
White-bellied Woodstar	*Chaetocercus mulsant*	900–3000	R	Co, SP, **Su**	s
Trogoniformes					
Trogonidae					
White-tailed Trogon	*Trogon viridis*	250–750	R	Mk, AC	r
Blue-crowned Trogon	*Trogon curucui*	250–1500	R	**Mk**, **AC**, Co	s
Violaceous Trogon	*Trogon violaceus*	250–800	R	Mk, AC	s
Collared Trogon	*Trogon collaris*	250–1050	R	Mk, **AC**, Co	s
Masked Trogon	*Trogon personatus*	1100–3500	R	Co, SP, **Su**, Pi, LE, AA	s
Black-tailed Trogon	*Trogon melanurus*	250–1000	R	**Mk**, **AC**, Co	s
Pavonine Quetzal	*Pharomachrus pavoninus*	250–1200	R	AC	s
Golden-headed Quetzal	*Pharomachrus auriceps*	1300–2800	R	SP, **Su**, Pi, **LE**	s*
Crested Quetzal	*Pharomachrus antisianus*	1000–2100	R	SP, **Su**	s*
Coraciiformes					
Alcedinidae					
Ringed Kingfisher	*Ceryle torquata*	250–1000	R	Mk, AC, Co	p
Amazon Kingfisher	*Chloroceryle amazona*	250–1300	R	**Mk**, AC, Co, SP	s
Green Kingfisher	*Chloroceryle americana*	250–1350	R	Mk, **AC**	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Green-and-rufous Kingfisher	*Chloroceryle inda*	250–500	R	Mk, AC	s
American Pygmy Kingfisher	*Chloroceryle aenea*	250–500	R	Mk	s
Momotidae					
Broad-billed Motmot	*Electron platyrhynchum*	250–700	R	AC	s
Rufous Motmot	*Baryphthengus martii*	250–1600	R	**Mk**, AC, **Co**, SP	s
Blue-crowned Motmot	*Momotus momota*	250–700	R	Mk, AC	s
Highland Motmot[3]	*Momotus aequatorialis*	1000–2400	R	Co, SP, Su,	s
Galbuliformes					
Galbulidae					
Purus Jacamar	*Galbalcyrhynchus purusianus*	250–400	R		r
White-throated Jacamar	*Brachygalba albogularis*	250–600	R	Mk, AC	s
Bluish-fronted Jacamar	*Galbula cyanescens*	250–1450	R	**Mk**, **AC**, **Co**, SP	s
Paradise Jacamar	*Galbula dea*	250–500	R		
Great Jacamar	*Jacamerops aureus*	250–500	R	AC	s*
Bucconidae					
White-necked Puffbird	*Notharchus hyperrhynchus*	250–550	R	AC	r
Pied Puffbird	*Notharchus tectus*	250–500	R		
Chestnut-capped Puffbird	*Bucco macrodactylus*	250–1000	R	Mk, AC	s
Spotted Puffbird	*Bucco tamatia*	250–500	R		s
Collared Puffbird	*Bucco capensis*	250–500	R		
Striolated Puffbird	*Nystalus striolatus*	250–1200	R	Mk, AC, Co	s
Semicollared Puffbird	*Malacoptila semicincta*	250–1250	R	AC, **Co**	s
Black-streaked Puffbird	*Malacoptila fulvogularis*	900–1950	R	SP, Su	s
Lanceolated Monklet	*Micromonacha lanceolata*	500–1500	R	Co	s
Rufous-capped Nunlet	*Nonnula ruficapilla*	250–1250	R	**Mk**, Co	s
Black-fronted Nunbird	*Monasa nigrifrons*	250–750	R	Mk, AC	s
White-fronted Nunbird	*Monasa morphoeus*	250–750	R	AC	s
Yellow-billed Nunbird	*Monasa flavirostris*	250–1250	R	Mk, Co	s*
Swallow-wing	*Chelidoptera tenebrosa*	250–800	R	Mk, AC, Co	s
Piciformes					
Capitonidae					
Gilded Barbet	*Capito auratus*	250–1350	R	AC	s
Lemon-throated Barbet	*Eubucco richardsoni*	250–1000	R	Mk, **AC**, **Co**	s
Scarlet-hooded Barbet	*Eubucco tucinkae*	250–800	R	Mk	s
Versicolored Barbet	*Eubucco versicolor*	750–2100	R	Co, SP, **Su**	s
Ramphastidae					
White-throated Toucan	*Ramphastos tucanus*	250–800	R	Mk, **AC**, Co	s
Channel-billed Toucan	*Ramphastos vitellinus*	250–600	R	Mk, AC	s
Emerald Toucanet	*Aulacorhynchus prasinus*	250–1500	R	**Mk**, **AC**, **Co**, SP	s
Chestnut-tipped Toucanet	*Aulacorhynchus derbianus*	800–1550	R	**Co**, SP	s
Blue-banded Toucanet	*Aulacorhynchus coeruleicinctis*	1300–2700	R	SP, **Su**, **Pi**, LE	s*
Gray-breasted Mountain-Toucan	*Andigena hypoglauca*	1450–3500	R	Pi, **LE**, **AA**	s*
Golden-collared Toucanet	*Selenidera reinwardtii*	250–1050	R	**Mk**, AC	s
Lettered Aracari	*Pteroglossus inscriptus*	250–500	R	Mk	p
Ivory-billed Aracari	*Pteroglossus azara*	250–1200	R	AC, Co	s
Chestnut-eared Aracari	*Pteroglossus castanotis*	250–1000	R	**Mk**, AC, Co	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Curl-crested Aracari	*Pteroglossus beauharnaesii*	250–800	R	AC	s
Picidae					
Bar-breasted Piculet	*Picumnus aurifrons*	250–1250	R	AC	s
Ocellated Piculet	*Picumnus dorbignyanus*	1950	R	Su	
Rufous-breasted Piculet	*Picumnus rufiventris*	250–1250	R	**Mk**, **AC**, Co, SP	s
Fine-barred Piculet	*Picumnus subtilis*	450–1100	R	**Mk**, AC, Co	s
Yellow-tufted Woodpecker	*Melanerpes cruentatus*	250–1200	R	Mk, AC, Co	s
Bar-bellied Woodpecker	*Veniliornis nigriceps*	2400–3500	R	**LE**, AA	s
Little Woodpecker	*Veniliornis passerinus*	250–1000	R	**Mk**, **AC**, Co	s
Red-stained Woodpecker	*Veniliornis affinis*	250–1400	R	AC, **Co**	s
White-throated Woodpecker	*Piculus leucolaemus*	250–850	R	AC	s
Golden-green Woodpecker	*Piculus chrysochloros*	250–500	R		
Golden-olive Woodpecker	*Piculus rubiginosus*	750–2000	R	SP, Su	s
Crimson-mantled Woodpecker	*Piculus rivolii*	1500–3350	R	SP, **Su**, Pi, LE, AA	s*
Spot-breasted Woodpecker	*Colaptes punctigula*	250–800	R		s
Andean Flicker	*Colaptes rupicola*	3000–3500	R		
Scaly-breasted Woodpecker	*Celeus grammicus*	250–1200	R	Mk, **AC**	s
Chestnut Woodpecker	*Celeus elegans*	250–500	R		s
Cream-colored Woodpecker	*Celeus flavus*	250–500	R	Mk, AC	r/p
Rufous-headed Woodpecker	*Celeus spectabilis*	250–500	R	Mk	s
Ringed Woodpecker	*Celeus torquatus*	250–500	R		r
Lineated Woodpecker	*Dryocopus lineatus*	250–1550	R	Mk, AC, Co, SP	s
Crimson-bellied Woodpecker	*Campephilus haematogaster*	1450–2000	R	SP, Su	s
Red-necked Woodpecker	*Campephilus rubricollis*	300–650	R	Mk, AC	s
Crimson-crested Woodpecker	*Campephilus melanoleucos*	250–1400	R	Mk, AC, **Co**	s
Passeriformes					
Furnariidae					
Slender-billed Miner	*Geositta tenuirostris*	3100–3500	R		
Bar-winged Cinclodes	*Cinclodes fuscus*	3350–3500	R	AA	s*
Pale-legged Hornero	*Furnarius leucopus*	250–1100	R	**Mk**, AC, **Co**	s
Andean Tit-Spinetail	*Leptasthenura andicola*	3500	R		
Puna Thistletail	*Schizoeaca helleri*	2700–3500	R	LE, AA	s
Azara's Spinetail	*Synallaxis azarae*	1000–3000	R	Co, SP, **Su**, **Pi**, **LE**	s
Pale-breasted Spinetail	*Synallaxis albescens*	600	V		
Dark-breasted Spinetail	*Synallaxis albigularis*	250–900	R	**Mk**, Co	s
Ruddy Spinetail	*Synallaxis rutilans*	250–400	R		r
Chestnut-throated Spinetail	*Synallaxis cherriei*	300	R		s
Cabanis' Spinetail	*Synallaxis cabanisi*	250–1500	R	**Mk**, Co, SP	s
Plain-crowned Spinetail	*Synallaxis gujanensis*	250–1300	R	**Mk**, **AC**, Co, SP	s
Marcapata Spinetail	*Cranioleuca marcapatae*	2350–3500	R	Pi, LE, AA	s
Ash-browed Spinetail	*Cranioleuca curtata*	700–1600	R	Co, SP	s
Speckled Spinetail	*Cranioleuca gutturata*	250–1100	R	Mk, **AC**, Co	s
Creamy-crested Spinetail	*Cranioleuca albicapilla*	2500–3300	R	Pi	s
Plain Softtail	*Thripophaga fusciceps*	250–600	R	Mk	r
Streak-throated Canastero	*Asthenes humilis*	3500	R		
Line-fronted Canastero	*Asthenes urubambensis*	3350–3450	R	AA	s
Scribble-tailed Canastero	*Asthenes maculicauda*	3450–3500	R	AA	p

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Orange-fronted Plushcrown	*Metopothrix aurantiacus*	250–1100	R	Mk	s
Rusty-winged Barbtail	*Premnornis guttuligera*	1300–2500	R	Su	s*
Spotted Barbtail	*Premnoplex brunnescens*	900–2100	R	Co, **SP**, **Su**	s
Pearled Treerunner	*Margarornis squamiger*	1900–3500	R	Su, Pi, LE, AA	s
Streaked Tuftedcheek	*Pseudocolaptes boissonneautii*	2000–3500	R	Su, **Pi**, LE, **AA**	s*
Point-tailed Palmcreeper	*Berlepschia rikeri*	250–600	R		r
Montane Foliage-gleaner	*Anabacerthia striaticollis*	1000–2000	R	**SP**, Su	s
Buff-browed Foliage-gleaner	*Syndactyla rufosuperciliata*	1000–1950	R	**SP**, Su	s
Peruvian Recurvebill	*Simoxenops ucayalae*	250–1300	R	Mk, **Co**	s
Chestnut-winged Hookbill	*Ancistrops strigilatus*	250–1100	R	Mk, AC, Co	s
Striped Woodhaunter	*Hyloctistes subulatus*	250–1300	R	Mk, AC	s
Rufous-tailed Foliage-gleaner	*Philydor ruficaudatum*	250–900	R	AC	s
Rufous-rumped Foliage-gleaner	*Philydor erythrocercum*	250–500	R	AC	s
Ochre-bellied Foliage-gleaner[4]	*Philydor ochrogaster*	750–1600	R	**Co**, SP	s
Chestnut-winged Foliage-gleaner	*Philydor erythropterum*	250–900	R	Mk, AC	s
Buff-fronted Foliage-gleaner	*Philydor rufum*	250–1000	R	Mk	s
Cinnamon-rumped Foliage-gleaner	*Philydor pyrrhodes*	250–450	R	AC	s
Dusky-cheeked Foliage-gleaner	*Anabazenops dorsalis*	250–1350	R	**Mk**, AC, **Co**, SP	s
Black-billed Treehunter	*Thripadectes melanorhynchus*	900–1600	R	Co, **SP**	s
Striped Treehunter	*Thripadectes holostictus*	1500–2500	R	SP, **Su**	s
Buff-throated Treehunter	*Thripadectes scrutator*	2300–3200	R	Pi, **AA**	s*
Buff-throated Foliage-gleaner	*Automolus ochrolaemus*	250–1400	R	Mk, AC, Co	s
Olive-backed Foliage-gleaner	*Automolus infuscatus*	250–550	R	Mk, AC	s
Brown-rumped Foliage-gleaner	*Automolus melanopezus*	250–450	R		s
Ruddy Foliage-gleaner	*Automolus rubiginosus*	250–1400	R	Mk, Co	s
Chestnut-crowned Foliage-gleaner	*Automolus rufipileatus*	250–1000	R	**Mk**, **AC**, Co	s
Tawny-throated Leaftosser	*Sclerurus mexicanus*	250–1100	R	AC, Co	s
Black-tailed Leaftosser	*Sclerurus caudacutus*	250–1100	R	AC	s
Gray-throated Leaftosser	*Sclerurus albigularis*	350–1500	R		s
Sharp-tailed Streamcreeper	*Lochmias nematura*	500–2850	R	**AC**, Co, **SP**, **Su**, **Pi**, **LE**	s
Rufous-tailed Xenops	*Xenops milleri*	250–500	R	Mk	
Slender-billed Xenops	*Xenops tenuirostris*	250–500	R	AC	s
Streaked Xenops	*Xenops rutilans*	500–1600	R	AC, Co, SP	s
Plain Xenops	*Xenops minutus*	250–1500	R	Mk, AC, Co	s
Tyrannine Woodcreeper	*Dendrocincla tyrannina*	2100–3150	R	**Su**, **Pi**, LE, AA	s
Plain-brown Woodcreeper	*Dendrocincla fuliginosa*	250–1200	R	Mk, AC, Co, SP	s
White-chinned Woodcreeper	*Dendrocincla merula*	250–500	R	Mk, **AC**	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Long-tailed Woodcreeper	*Deconychura longicauda*	250–1250	R	AC	s
Olivaceous Woodcreeper	*Sittasomus griseicapillus*	250–1200	R	Mk, AC, Co	s
Wedge-billed Woodcreeper	*Glyphorynchus spirurus*	250–1400	R	Mk, AC, Co	s
Long-billed Woodcreeper	*Nasica longirostris*	250–500	R		s
Cinnamon-throated Woodcreeper	*Dendrexetastes rufigula*	250–1100	R	Mk, AC, Co	s
Bar-bellied Woodcreeper	*Hylexetastes stresemanni*	250–500	R		
Strong-billed Woodcreeper	*Xiphocolaptes promeropirhynchus*	1200–2500	R	SP, Su, Pi	s
Rusty-breasted Woodcreeper[5]	*Xiphocolaptes orenocensis*	500–1100	R	Mk, AC, Co	s
Amazonian Barred Woodcreeper	*Dendrocolaptes certhia*	250–800	R	Mk, **AC**	s
Black-banded Woodcreeper	*Dendrocolaptes picumnus*	250–1350	R		s
Straight-billed Woodcreeper	*Xiphorhynchus picus*	250–500	R	Mk	s
Striped Woodcreeper	*Xiphorhynchus obsoletus*	250–500	R		s
Ocellated Woodcreeper	*Xiphorhynchus ocellatus*	250–1350	R	Co	s
Elegant Woodcreeper	*Xiphorhynchus elegans*	250–600	R	Mk, **AC**	s
Buff-throated Woodcreeper	*Xiphorhynchus guttatus*	250–850	R	Mk, **AC**, Co	s
Olive-backed Woodcreeper	*Xiphorhynchus triangularis*	1100–2400	R	SP, Su	s
Montane Woodcreeper	*Lepidocolaptes lacrymiger*	2000–3200	R	Su, **Pi**, LE, **AA**	s
Lineated Woodcreeper	*Lepidocolaptes albolineatus*	250–1100	R	Mk, AC	s
Greater Scythebill	*Campylorhamphus pucherani*	2100–3000	R		r
Red-billed Scythebill	*Campylorhamphus trochilirostris*	250–1500	R	Mk, AC, Co, SP	s
Thamnophilidae					
Fasciated Antshrike	*Cymbilaimus lineatus*	250–950	R	Mk, AC	s
Bamboo Antshrike	*Cymbilaimus sanctaemariae*	250–1450	R	**Mk**, **Co**, SP	s
Undulated Antshrike	*Frederickena unduligera*	250–1050	R		s
Great Antshrike	*Taraba major*	250–1500	R	**Mk**, AC, Co	s
Barred Antshrike	*Thamnophilus doliatus*	250–1000	R	AC	s
Chestnut-backed Antshrike	*Thamnophilus palliatus*	500–1600	R	**Mk**, Co, **SP**	s
White-shouldered Antshrike	*Thamnophilus aethiops*	250–950	R	Mk, AC	s
Uniform Antshrike	*Thamnophilus unicolor*	1250–2000	R	SP, Su	s
Plain-winged Antshrike	*Thamnophilus schistaceus*	250–1400	R	Mk, **AC**, Co, SP	s
Amazonian Antshrike	*Thamnophilus amazonicus*	250–400	R		r
Variable Antshrike	*Thamnophilus caerulescens*	1250–2000	R	Su	s
Black Bushbird	*Neoctantes niger*	250–800	R		s
Russet Antshrike	*Thamnistes anabatinus*	700–1500	R	Co, SP	s
Plain Antvireo	*Dysithamnus mentalis*	600–1600	R	Co, SP	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Dusky-throated Antshrike	*Thamnomanes ardesiacus*	250–850	R	AC	s
Bluish-slate Antshrike	*Thamnomanes schistogynus*	250–1400	R	Mk, AC, Co	s
Spot-winged Antshrike	*Pygiptila stellaris*	250–600	R	Mk, **AC**	s
White-eyed Antwren	*Myrmotherula leucophthalma*	250–800	R	Mk, AC	s
Foothill Antwren	*Myrmotherula spodionota*	700–1350	R	Co	s
Ornate Antwren	*Myrmotherula ornata*	250–1500	R	**Mk**, AC, **Co**, **SP**	s
Rufous-tailed Antwren	*Myrmotherula erythrura*	250–900	R	Mk, **AC**	s
Pygmy Antwren	*Myrmotherula brachyura*	250–1300	R	Mk, **AC**, Co	s
Sclater's Antwren	*Myrmotherula sclateri*	250–700	R	AC	s*
Amazonian Streaked Antwren	*Myrmotherula multostriata*	250–500	R	Mk, AC	r
Stripe-chested Antwren	*Myrmotherula longicauda*	500–1550	R	Co, SP	s
Plain-throated Antwren	*Myrmotherula hauxwelli*	250–500	R	Mk, AC	s
White-flanked Antwren	*Myrmotherula axillaris*	250–1400	R	Mk, AC	s
Slaty Antwren	*Myrmotherula schisticolor*	1100–1950	R	Co, **SP**, Su	s
Long-winged Antwren	*Myrmotherula longipennis*	250–700	R	AC	s
Ihering's Antwren	*Myrmotherula iheringi*	250–650	R	Mk	s
Gray Antwren	*Myrmotherula menetriesii*	250–1100	R	Mk, **AC**, Co	s
Banded Antbird	*Dichrozona cincta*	250–450	R		r
Yellow-breasted Antwren	*Herpsilochmus axillaris*	750–1600	R	**Co**, SP	s
Rufous-winged Antwren	*Herpsilochmus rufimarginatus*	250–1000	R	Mk, AC	s
Dot-winged Antwren	*Microrhopias quixensis*	250–1350	R	**Mk**, AC, **Co**	s
Striated Antbird	*Drymophila devillei*	250–1300	R	Mk	s
Long-tailed Antbird	*Drymophila caudata*	1650–2100	R	Su	s*
Rufous-rumped Antwren	*Terenura callinota*	750–1000	R		
Chestnut-shouldered Antwren	*Terenura humeralis*	250–650	R	AC	r
Yellow-rumped Antwren	*Terenura sharpei*	1000–1550	R	Co, SP	r/p
Gray Antbird	*Cercomacra cinerascens*	250–1000	R	Mk, AC	s
Blackish Antbird	*Cercomacra nigrescens*	250–600	R	Mk, AC	s
Black Antbird	*Cercomacra serva*	250–1550	R	**Mk**, **AC**, Co, SP	s
Manu Antbird	*Cercomacra manu*	250–1350	R	**Mk**, Co	s
White-backed Fire-eye	*Pyriglena leuconota*	500–1850	R	Co, SP	s
White-browed Antbird	*Myrmoborus leucophrys*	250–1350	R	Mk, AC, Co	s
Black-faced Antbird	*Myrmoborus myotherinus*	250–1250	R	**Mk**, **AC**, Co	s
Warbling Antbird	*Hypocnemis cantator*	250–1600	R	**Mk**, AC, Co, **SP**	s
Band-tailed Antbird	*Hypocnemoides maculicauda*	250–500	R		s
Silvered Antbird	*Sclateria naevia*	250–600	R	Mk, AC	s
White-lined Antbird	*Percnostola lophotes*	250–1350	R	**Mk**, AC, Co	s
Spot-winged Antbird	*Schistocichla leucostigma*	250–1400	R	Mk, Co, SP	s
Chestnut-tailed Antbird	*Myrmeciza hemimelaena*	250–1550	R	**Mk**, AC, **Co**, SP	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Black-throated Antbird	*Myrmeciza atrothorax*	250–1000	R	**Mk**, **AC**, Co	s
Goeldi's Antbird	*Myrmeciza goeldii*	250–800	R	**Mk**, **AC**, Co	s
Plumbeous Antbird	*Myrmeciza hyperythra*	250–800	R	**Mk**, Co	s
Sooty Antbird	*Myrmeciza fortis*	250–1300	R	Mk, AC, Co	s
White-throated Antbird	*Gymnopithys salvini*	250–800	R	**Mk**, **AC**, Co	s
Hairy-crested Antbird	*Rhegmatorhina melanosticta*	250–1200	R	AC, Co	s
Spot-backed Antbird	*Hylophylax naevius*	250–1200	R	Mk, AC, Co	s
Scale-backed Antbird	*Hylophylax poecilinotus*	250–850	R	AC	s
Black-spotted Bare-eye	*Phlegopsis nigromaculata*	250–1250	R	Mk, AC, Co	s
Formicariidae					
Rufous-capped Antthrush	*Formicarius colma*	250–500	R	AC	s
Black-faced Antthrush	*Formicarius analis*	250–1150	R	Mk, AC, Co	s
Rufous-fronted Antthrush	*Formicarius rufifrons*	250–350	R		r/p
Rufous-breasted Antthrush	*Formicarius rufipectus*	1100–1700	R	Co, **SP**	s
Short-tailed Antthrush	*Chamaeza campanisona*	1100–1600	R		s
Striated Antthrush	*Chamaeza nobilis*	250–450	R		s
Barred Antthrush	*Chamaeza mollissima*	1900–3100	R	**Su**, AA	s*
Undulated Antpitta	*Grallaria squamigera*	2350–3500	R	LE, AA	s
Scaled Antpitta	*Grallaria guatimalensis*	700–1600	R	Co, SP	s
Elusive Antpitta	*Grallaria eludens*	250–400	R		r
White-throated Antpitta	*Grallaria albigula*	1150–2100	R	SP, **Su**	s*
Red-and-white Antpitta	*Grallaria erythroleuca*	2100–3000	R	Pi	r/p
Rufous Antpitta	*Grallaria rufula*	1800–3500	R	Su, **Pi**, **LE**, AA	s*
Amazonian Antpitta	*Hylopezus berlepschi*	250–600	R	Mk, **AC**	s
Thrush-like Antpitta	*Myrmothera campanisona*	250–1200	R	**Mk**, AC, Co, SP	s
Ochre-breasted Antpitta	*Grallaricula flavirostris*	800–2200	R	Su	s*
Rusty-breasted Antpitta	*Grallicula ferrugineipectus*	2600–3250	R	LE, AA	r
Conopophagidae					
Ash-throated Gnateater	*Conopophaga peruviana*	250–900	R	Mk, AC	s
Chestnut-crowned Gnateater	*Conophaga castaneiceps*	1200–2000	R		r
Slaty Gnateater	*Conopophaga ardesiaca*	850–1650	R	Co, **SP**	s
Rhinocryptidae					
Rusty-belted Tapaculo	*Liosceles thoracicus*	250–1100	R	Mk, AC, Co	s
Trilling Tapaculo	*Scytalopus parvirostris*	2100–3450	R	Su, Pi, **LE**, **AA**	s*
White-crowned Tapaculo	*Scytalopus atratus*	1000–2200	R	Co, **SP**, **Su**	s
Andean Tapaculo	*Scytalopus simonsi*	2800–3500	R		r
Diademed Tapaculo	*Scytalopus schulenbergi*	2800–3350	R		r
Tyrannidae					
Rough-legged Tyrannulet	*Phyllomyias burmeisteri*	750–1600	R		s
Sclater's Tyrannulet	*Phyllomyias sclateri*	1900	R	Su	
Ashy-headed Tyrannulet	*Phyllomyias cinereiceps*	1300–2700	R	SP	
Tawny-rumped Tyrannulet	*Phyllomyias uropygialis*	2700–2800	R	**Pi**, LE	s*
Yellow-crowned Tyrannulet	*Tyrannulus elatus*	250–850	R	Mk, AC, Co	s
Forest Elaenia	*Myiopagis gaimardii*	250–900	R	Mk, AC, Co	r
Gray Elaenia	*Myiopagis caniceps*	250–550	R	AC	s
Greenish Elaenia	*Myiopagis viridicata*	250–500	R		s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Yellow-bellied Elaenia	*Elaenia flavogaster*	450–900	R	Co	s
Large Elaenia	*Elaenia spectabilis*	250–1450	A	**AC**, SP	s
White-crested Elaenia	*Elaenia albiceps*	500–3250	R	SP, Su, **Pi**, LE, **AA**	s
Small-billed Elaenia	*Elaenia parvirostris*	250–1300	A	Mk, Co	s
Slaty Elaenia	*Elaenia strepera*	250–450	A		s
Mottle-backed Elaenia	*Elaenia gigas*	250–1550	R	Mk, Co, SP	s
Lesser Elaenia	*Elaenia chiriquensis*	500–600	R		r
Highland Elaenia	*Elaenia obscura*	1700–3000	R		
Sierran Elaenia	*Elaenia pallatangae*	1100–3250	R	SP, Pi, **LE**, **AA**	s
Mouse-colored Tyrannulet	*Phaeomyias murina*	250–500	R	Mk, AC	
White-lored Tyrannulet	*Ornithion inerme*	250–1000	R	Mk, AC, Co	s
Southern Beardless-Tyrannulet	*Camptostoma obsoletum*	250–500	R	Mk	s
White-banded Tyrannulet	*Mecocerculus stictopterus*	2400–3350	R	Pi, **LE**, **AA**	s*
White-throated Tyrannulet	*Mecocerculus leucophrys*	1800–3500	R	**Su**, Pi, **LE**, AA	s
Tufted Tit-Tyrant	*Anairetes parulus*	2500–3450	R	Pi, LE, AA	s
Torrent Tyrannulet	*Serpophaga cinerea*	600–3000	R	**SP**, **Su**, Pi	s
River Tyrannulet	*Serpophaga hypoleuca*	250–500	R		
Yellow Tyrannulet	*Capsiempis flaveola*	250–1050	R	Mk, Co	s
Subtropical Doradito	*Pseudocolopteryx acutipennis*	500	A		s
Hazel-fronted Pygmy-Tyrant	*Pseudotriccus simplex*	1100–1900	R	Co, **SP**, **Su**	s
Ringed Antpipit	*Corythopis torquatus*	250–1050	R	Mk, AC	s
Tawny-crowned Pygmy-Tyrant	*Euscarthmus meloryphus*	600	V		
Bolivian Tyrannulet	*Zimmerius bolivianus*	1000–2600	R	Co, SP, **Su**, **Pi**	s
Red-billed Tyrannulet	*Zimmerius cinereicapillus*	550–1300	R	Co	s
Slender-footed Tyrannulet	*Zimmerius gracilipes*	250–850	R	Mk, **AC**, Co	s
Variegated Bristle-Tyrant	*Phylloscartes poecilotis*	1500–2300	R	Su	
Marble-faced Bristle-Tyrant	*Phylloscartes ophthalmicus*	750–1800	R	**Co**, SP	s
Spectacled Bristle-Tyrant	*Phylloscartes orbitalis*	500–1250	R		s
Mottle-cheeked Tyrannulet	*Phylloscartes ventralis*	1000–1650	R	Co, SP	s
Cinnamon-faced Tyrannulet	*Phylloscartes parkeri*	650–1550	R	Co, SP	s
Streak-necked Flycatcher	*Mionectes striaticollis*	550–2750	R	Co, SP, Su, Pi, LE	s
Olive-striped Flycatcher	*Mionectes olivaceus*	250–1400	R	**Mk**, AC, **Co**, SP	s
Ochre-bellied Flycatcher	*Mionectes oleagineus*	250–1350	R	**Mk**, **AC**, Co, SP	s
McConnell's Flycatcher	*Mionectes macconnelli*	250–1200	R	Mk, AC, Co	s
Sepia-capped Flycatcher	*Leptopogon amaurocephalus*	250–1100	R	Mk, AC, Co	s
Slaty-capped Flycatcher	*Leptopogon superciliaris*	600–1800	R	Co, SP, Su	s
Inca Flycatcher	*Leptopogon taczanowskii*	1850–2750	R	**Su**, Pi	s*
Southern Scrub-Flycatcher	*Sublegatus modestus*	250–1050	A	Mk	s
Amazonian Scrub-Flycatcher	*Sublegatus obscurior*	250–600	R		s
Plain Tyrannulet	*Inezia inornata*	250–500	A	Mk, AC	
Ornate Flycatcher	*Myiotriccus ornatus*	500–1500	R	Co	s
Short-tailed Pygmy-Tyrant	*Myiornis ecaudatus*	250–800	R	Mk, **AC**, Co	s
Scale-crested Pygmy-Tyrant	*Lophotriccus pileatus*	800–1800	R	Co, **SP**	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Long-crested Pygmy-Tyrant	*Lophotriccus eulophotes*	250–500	R		s
Flammulated Bamboo-Tyrant	*Hemitriccus flammulatus*	250–850	R	**Mk**, Co	s
White-bellied Tody-Tyrant	*Hemitriccus griseipectus*	250–850	R	AC	s
Johannes' Tody-Tyrant	*Hemitriccus iohannis*	250–800	R		s
Black-throated Tody-Tyrant	*Hemitriccus granadensis*	2600–3000	R	LE, **AA**	s
Buff-throated Tody-Tyrant	*Hemitriccus rufigularis*	750–1100	R		s
White-cheeked Tody-Tyrant	*Poecilotriccus albifacies*	250–1050	R	**Mk**, **AC**, Co	s
Ochre-faced Tody-Flycatcher	*Poecilotriccus plumbeiceps*	1600–2150	R	SP, Su	r
Rusty-fronted Tody-Flycatcher	*Poecilotriccus latirostris*	250–1000	R	**Mk**, **AC**, Co	s
Black-backed Tody-Flycatcher	*Poecilotriccus pulchellus*	600–1500	R	Co	s
Spotted Tody-Flycatcher	*Todirostrum maculatum*	250–500	R		r
Yellow-browed Tody-Flycatcher	*Todirostrum chrysocrotaphum*	250–1000	R	Mk, AC	s
Olivaceous Flatbill	*Rhynchocyclus olivaceus*	250–1000	R		s
Fulvous-breasted Flatbill	*Rhynchocyclus fulvipectus*	1000–2000	R	Co, **SP**, **Su**	s
Yellow-margined Flycatcher	*Tolmomyias assimilis*	250–1000	R	Mk, AC, Co	s
Gray-crowned Flycatcher	*Tolmomyias poliocephalus*	250–1450	R	Mk, **AC**, Co, SP	s
Yellow-breasted Flycatcher	*Tolmomyias flaviventris*	250–1500	R	Mk, **AC**, **Co**, SP	s
White-throated Spadebill	*Platyrinchus mystaceus*	800–1800	R	Co, SP	s
Golden-crowned Spadebill	*Platyrinchus coronatus*	250–500	R	AC	r
White-crested Spadebill	*Platyrinchus platyrhynchos*	250–850	R		s
Royal Flycatcher	*Onychorhynchus coronatus*	250–500	R	AC	s
Unadorned Flycatcher	*Myiophobus inornatus*	1000–2150	R	SP, **Su**	s
Handsome Flycatcher	*Myiophobus pulcher*	1500–2600	R	**Su**, Pi	s
Ochraceous-breasted Flycatcher	*Myiophobus ochraceiventris*	2200–3400	R	Su, Pi, **LE**	s*
Bran-colored Flycatcher	*Myiophobus fasciatus*	250–1450	A	**Mk**, AC, Co, SP	s
Tawny-breasted Flycatcher	*Myiobius villosus*	650–1350	R		s
Sulphur-rumped Flycatcher	*Myiobius barbatus*	250–650	R	AC	s
Ruddy-tailed Flycatcher	*Terenotriccus erythrurus*	250–950	R	Mk, **AC**	s
Cinnamon Tyrant-Manakin	*Neopipo cinnamomea*	250–700	R		s
Cinnamon Flycatcher	*Pyrrhomyias cinnamomea*	900–2850	R	Co, SP, **Su**, **Pi**, **LE**	s
Cliff Flycatcher	*Hirundinea ferruginea*	500–1200	R		s
Euler's Flycatcher	*Lathrotriccus euleri*	250–1500	R	AC, Co	s
Fuscous Flycatcher	*Cnemotriccus fuscatus*	250–500	R		s
Alder Flycatcher	*Empidonax alnorum*	250–1600	B	Co	s
Olive-sided Flycatcher	*Contopus cooperi*	250–2000	B	Co	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Smoke-colored Pewee	*Contopus fumigatus*	1000–2800	R	Co, SP, **Su**, Pi, LE	s*
Western Wood-Pewee	*Contopus sordidulus*	600–1400	B		s
Eastern Wood-Pewee	*Contopus virens*	250–1400	B	Co, **SP**	s
Olive Flycatcher	*Mitrephanes olivaceus*	1550–2100	R	SP, **Su**	s*
Black Phoebe	*Sayornis nigricans*	600–2000	R	Co, SP	s
Vermilion Flycatcher	*Pyrocephalus rubinus*	250–600	A	Mk, AC	s
Andean Tyrant	*Knipolegus signatus*	1000–2700	R		
Rufous-tailed Tyrant	*Knipolegus poecilurus*	900–2200	R	Su	s
White-winged Black-Tyrant	*Knipolegus aterrimus*	1250–3500	R	SP, Pi, **LE**	s
Drab Water-Tyrant	*Ochthornis littoralis*	250–500	R	**Mk**, AC	s
Yellow-browed Tyrant	*Satrapa icterophrys*	250–500	A	Mk	
Little Ground-Tyrant	*Muscisaxicola fluviatilis*	250–1600	R	Mk, AC, Co, SP	s
Black-billed Shrike-Tyrant	*Agriornis montana*	3350–3500	R	AA	
Streak-throated Bush-Tyrant	*Myiotheretes striaticollis*	(250) 1300–3500	R	Pi, LE, AA	s
Smoky Bush-Tyrant	*Myiotheretes fumigatus*	2000–3200	R		
Rufous-bellied Bush-Tyrant	*Myiotheretes fuscorufus*	2350–3400	R	Pi, LE, AA	s
Red-rumped Bush-Tyrant	*Cnemarchus erythropygius*	3250–3350	R		
Rufous-webbed Tyrant	*Polioxolmis rufipennis*	3000–3400	R		
Black-backed Water-Tyrant	*Fluvicola albiventer*	250–450	A		p
Crowned Chat-Tyrant	*Ochthoeca frontalis*	3200–3500	R	AA	s*
Golden-browed Chat-Tyrant	*Ochthoeca pulchella*	2200–3250	R	Su, Pi, LE	s
Slaty-backed Chat-Tyrant	*Ochthoeca cinnamomeiventris*	1500–2800	R	Su, **Pi**, **LE**	s
Rufous-breasted Chat-Tyrant	*Ochthoeca rufipectoralis*	2500–3450	R	Pi, **LE**, **AA**	s
Brown-backed Chat-Tyrant	*Ochthoeca fumicolor*	3250–3500	R	AA	s
D'Orbigny's Chat-Tyrant	*Ochthoeca oenanthoides*	3400–3500	R	AA	
White-browed Chat-Tyrant	*Ochthoeca leucophrys*	3000–3500	R		
Long-tailed Tyrant	*Colonia colonus*	300–1300	R	Mk, AC, Co, SP	s
Piratic Flycatcher	*Legatus leucophaius*	250–1200	R	Mk, AC, Co	s
Social Flycatcher	*Myiozetetes similis*	250–1500	R	**Mk**, **AC**, Co, SP	s
Gray-capped Flycatcher	*Myiozetetes granadensis*	250–1300	R	**Mk**, **AC**, **Co**, SP	s
Dusky-chested Flycatcher	*Myiozetetes luteiventris*	250–500	R		
Great Kiskadee	*Pitangus sulphuratus*	250–1000	R	Mk, AC	s
Lesser Kiskadee	*Pitangus lictor*	250–500	R		s
Three-striped Flycatcher	*Conopias trivirgata*	250	R		
Lemon-browed Flycatcher	*Conopias cinchoneti*	900–1950	R	Co, **SP**, Su	s*
Golden-crowned Flycatcher	*Myiodynastes chrysocephalus*	600–2750	R	Co, SP, **Su**, Pi	s
Sulphur-bellied Flycatcher	*Myiodynastes luteiventris*	250–1250	B	Mk	s
Streaked Flycatcher	*Myiodynastes maculatus*	250–1500	R	Co, SP	s
Boat-billed Flycatcher	*Megarynchus pitangua*	250–1200	R	Mk, AC, Co	s
Sulphury Flycatcher	*Tyrannopsis sulphurea*	250–600	R		r
Variegated Flycatcher	*Empidonomus varius*	250–450	A		

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Crowned Slaty-Flycatcher	*Empidononus aurantioatrocristatus*	250–1000	A	Mk, Co	
White-throated Kingbird	*Tyrannus albogularis*	250–500	A		
Tropical Kingbird	*Tyrannus melancholicus*	250–2600	R	Mk, AC, **Co**, SP	s
Fork-tailed Flycatcher	*Tyrannus savana*	250–500	A		
Eastern Kingbird	*Tyrannus tyrannus*	250–500	B		s
Grayish Mourner	*Rhytipterna simplex*	250–1400	R	AC, SP	s
Sirystes	*Sirystes sibilator*	250–500	R		r
Rufous Casiornis	*Casiornis rufus*	250–500	A		s
Dusky-capped Flycatcher[6]	*Myiarchus tuberculifer*	250–3250	R	**AC**, **Co**, SP, **Su**, **Pi**, AA	s
Swainson's Flycatcher	*Myiarchus swainsoni*	250–500	A	Mk, AC	s
Short-crested Flycatcher	*Myiarchus ferox*	250–1100	R	**Mk**, **AC**, Co	s
Pale-edged Flycatcher	*Myiarchus cephalotes*	1200–1900	R	SP, Su	
Brown-crested Flycatcher	*Myiarchus tyrannulus*	250–450	R	AC	
Large-headed Flatbill	*Ramphotrigon megacephala*	250–1200	R	**Mk**, **Co**, SP	s
Dusky-tailed Flatbill	*Ramphotrigon fuscicauda*	250–1050	R	Mk, Co	s
Rufous-tailed Flatbill	*Ramphotrigon ruficauda*	250–500	R	AC	s
Dull-capped Attila	*Attila bolivianus*	250–450	R	Mk, AC	s
Bright-rumped Attila	*Attila spadiceus*	250–1250	R	Mk, AC, Co, SP	s
Oxyruncidae					
Sharpbill	*Oxyruncus cristatus*	850–1300	R		s
Cotingidae					
Red-crested Cotinga	*Ampelion rubrocristata*	2500–3450	R	LE, AA	s*
Chestnut-crested Cotinga	*Ampelion rufaxilla*	1600–2850	R	**Su**, LE	s*
Band-tailed Fruiteater	*Pipreola intermedia*	1500–2900	R	SP, **Su**, Pi, **LE**	s
Barred Fruiteater	*Pipreola arcuata*	2600–3400	R	**Pi**, LE, **AA**	s*
Scarlet-breasted Fruiteater	*Pipreola frontalis*	1000–1500	R		s
Scaled Fruiteater	*Ampelioides tschudii*	700–1400	R		s
Andean Cock-of-the-rock	*Rupicola peruvianus*	650–2550	R	Co, SP, Su, Pi	s
Plum-throated Cotinga	*Cotinga maynana*	250–1000	R	Mk, Co	s
Spangled Cotinga	*Cotinga cayana*	250–800	R		s
Screaming Piha	*Lipaugus vociferans*	250–800	R	AC	s
Black-faced Cotinga	*Conioptilon mcilhennyi*	250–450	R		r/p
Gray-tailed Piha	*Snowornis subalaris*	850–1350	R		s
Purple-throated Cotinga	*Porphyrolaema porphyrolaema*	250–450	R		p
Bare-necked Fruitcrow	*Gymnoderus foetidus*	250–500	R	Mk, AC	s
Purple-throated Fruitcrow	*Querula purpurata*	250–1050	R	Mk, **AC**	s
Amazonian Umbrellabird	*Cephalopterus ornatus*	250–1650	R	Co, SP	s
Pipridae					
Sulphur-bellied Tyrant-Manakin	*Neopelma sulphureiventer*	250–450	R		s
Dwarf Tyrant-Manakin	*Tyranneutes stolzmanni*	250–800	R	Mk, **AC**	s
Fiery-capped Manakin	*Machaeropterus pyrocephalus*	250–1350	R	Mk, **AC**, **Co**	s
Blue-crowned Manakin	*Lepidothrix coronata*	250–900	R	Mk, AC	s
Cerulean-capped Manakin	*Lepidothrix coeruleocapilla*	750–1600	R	Co, SP	s
White-bearded Manakin	*Manacus manacus*	450–950	R	Mk, Co	p
Blue-backed Manakin	*Chiroxiphia pareola*	250–450	R	AC	s
Yungas Manakin	*Chiroxiphia boliviana*	950–2000	R	Co, SP	s
Green Manakin	*Xenopipo holochlora*	450–1100	R	AC	s
Jet Manakin	*Xenopipo unicolor*	1000–1800	R		s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Band-tailed Manakin	*Pipra fasciicauda*	250–1000	R	Mk, AC, Co	s
Round-tailed Manakin	*Pipra chloromeros*	250–1400	R	**Mk**, AC, Co	s
Incertae sedis[7]					
Black-crowned Tityra	*Tityra inquisitor*	250–600	R	AC	s
Black-tailed Tityra	*Tityra cayana*	250–450	R	AC	
Masked Tityra	*Tityra semifasciata*	250–1500	R	Mk, **Co**, SP	s
Varzea Schiffornis	*Schiffornis major*	250–500	R		s
Thrush-like Schiffornis	*Schiffornis turdinus*	250–1400	R	AC, Co	s
Cinereous Mourner	*Laniocera hypopyrra*	250–750	R	AC	s
White-browed Purpletuft	*Iodopleura isabellae*	250–850	R	Mk, AC	s
Shrike-like Cotinga	*Laniisoma elegans*	750–1400	R		s
Green-backed Becard	*Pachyramphus viridis*	900	R		p
Barred Becard	*Pachyramphus versicolor*	1500–2600	R	SP, Su, Pi, LE	s*
Chestnut-crowned Becard	*Pachyramphus castaneus*	250–500	R		
White-winged Becard	*Pachyramphus polychopterus*	250–1100	R	**Mk**, AC, Co	s
Black-and-White Becard	*Pachyramphus albogriseus*	1500	R		
Black-capped Becard	*Pachyramphus marginatus*	250–750	R	AC	s
Pink-throated Becard	*Pachyramphus minor*	250–1050	R	Mk, AC	s
Wing-barred Piprites	*Piprites chloris*	250–1050	R	Mk, AC, Co	s
Vireonidae					
Rufous-browed Peppershrike	*Cyclarhis gujanensis*	300–1200	R	Co	s
Slaty-capped Shrike-Vireo	*Vireolanius leucotis*	250–1500	R	AC	s
Brown-capped Vireo	*Vireo leucophrys*	1300–2500	R	SP, **Su**, Pi	s*
Red-eyed Vireo	*Vireo olivaceus*	250–1900	R	Mk, AC, Co, **SP**, Su	s
Yellow-green Vireo	*Vireo flavoviridis*	250–900	B	Co	s
Lemon-chested Greenlet	*Hylophilus thoracicus*	250–850	R	Mk, AC, Co	s
Dusky-capped Greenlet	*Hylophilus hypoxanthus*	250–1100	R	Mk, AC, Co	s
Tawny-crowned Greenlet	*Hylophilus ochraceiceps*	250–1050	R	AC	s
Corvidae					
White-collared Jay	*Cyanolyca viridicyanus*	1850–3000	R	**Su**, **Pi**, LE	s*
Violaceous Jay	*Cyanocorax violaceus*	250–1400	R	Mk, AC, Co	s
Purplish Jay	*Cyanocorax cyanomelas*	250–1100	R	Mk, AC, Co	s
Green Jay	*Cyanocorax yncas*	1150–2200	R	SP, Su	r
Hirundinidae					
White-winged Swallow	*Tachycineta albiventer*	250–500	R	Mk, AC	p
White-rumped Swallow	*Tachycineta leucorrhoa*	250	V		s
Brown-chested Martin	*Progne tapera*	250–1400	R	SP	
Purple Martin	*Progne subis*	250	V		
Gray-breasted Martin	*Progne chalybea*	250–500	R		
Southern Martin	*Progne elegans*	250	V		
Andean Swallow	*Hapalochelidon andecola*	3450–3500	R	AA	
Blue-and-white Swallow	*Pygochelidon cyanoleuca*	250–3450	R	AC, Co, SP, **Su**, **Pi**, LE, AA	s
Brown-bellied Swallow	*Notiochelidon murina*	2600–3500	R	AA	s*
Pale-footed Swallow	*Notiochelidon flavipes*	1500–3500	R	SP, Su	
White-banded Swallow	*Atticora fasciata*	250–800	R	Mk, AC	s
White-thighed Swallow	*Neochelidon tibialis*	250–1250	R	Mk, SP	s
Tawny-headed Swallow	*Alopochelidon fucata*	750	V		
Southern Rough-winged Swallow	*Stelgidopteryx ruficollis*	250–1600	R	**Mk**, AC, **Co**, SP	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Bank Swallow	*Riparia riparia*	250–500	B	Mk	
Barn Swallow	*Hirundo rustica*	250–3450	B	Mk, AA	s
Cliff Swallow	*Petrochelidon pyrrhonota*	250–750	B		
Troglodytidae					
Scaly-breasted Wren	*Microcerculus marginatus*	250–1250	R	Mk, AC, Co	s
Wing-banded Wren	*Microcerculus bambla*	300	R		s
Gray-mantled Wren	*Odontorchilus branickii*	750–1800	R	Co, SP	s
House Wren	*Troglodytes aedon*	250–3500	R	Mk, AC, Co, SP, Pi, LE, AA	s
Mountain Wren	*Troglodytes solstitialis*	1850–3400	R	Su, **Pi**, **LE**, AA	s*
Sedge Wren	*Cistothorus platensis*	2950–3500	R	LE, AA	
Thrush-like Wren	*Campylorhynchus turdinus*	250–1050	R	Mk, Co	s
Moustached Wren	*Thryothorus genibarbis*	250–1500	R	**Mk**, **AC**, **Co**, SP	s
Buff-breasted Wren	*Thryothorus leucotis*	250–450	R		r
Fulvous Wren	*Cinnycerthia fulva*	2100–3000	R	Su, Pi, LE	s
Gray-breasted Wood-Wren	*Henicorhina leucophrys*	1000–2850	R	Co, **SP**, **Su**, **Pi**, **LE**	s
Chestnut-breasted Wren	*Cyphorhinus thoracicus*	800–1600	R	Co, SP	s
Musician Wren	*Cyphorhinus arada*	250–500	R	Mk, AC	s
Polioptilidae					
Tawny-faced Gnatwren	*Microbates cinereiventris*	450–1000	R	AC	s
Long-billed Gnatwren	*Ramphocaenus melanurus*	250–450	R		s
Tropical Gnatcatcher	*Polioptila plumbea*	250	R		
Incertae sedis[8]					
Black-capped Donacobius	*Donacobius atricapilla*	250–500	R	Mk	s
Cinclidae					
White-capped Dipper	*Cinclus leucocephalus*	950–2850	R	Co, SP, **Su**, **LE**	s*
Turdidae					
Andean Solitaire	*Myadestes ralloides*	750–2900	R	Co, **SP**, **Su**, Pi, **LE**	s
Slaty-backed Nightingale-Thrush	*Catharus fuscater*	1500–2850	R	Su, Pi, LE	s
Spotted Nightingale-Thrush	*Catharus dryas*	700–1500	R	Co, SP	s
Veery	*Catharus fuscescens*	500	V		
Swainson's Thrush	*Catharus ustulatus*	250–3500	B	Co	s
White-eared Solitaire	*Entomodestes leucotis*	1300–2900	R	SP, **Su**, **LE**	s
Pale-eyed Thrush	*Platycichla leucops*	850–2600	R	SP, Su, Pi	s
Great Thrush	*Turdus fuscater*	2500–3500	R	Pi, **LE**, **AA**	s
Chiguanco Thrush	*Turdus chiguanco*	1300–3500	R	SP, Su, Pi, **LE**, AA	s
Glossy-black Thrush	*Turdus serranus*	1400–3200	R	Su, LE, AA	s
Slaty Thrush	*Turdus nigriceps*	250–1850	A	AC	s
Creamy-bellied Thrush	*Turdus amaurochalinus*	250–500	A	AC	s
Black-billed Thrush	*Turdus ignobilis*	250–1500	R	**Mk**, AC, **Co**	s
Lawrence's Thrush	*Turdus lawrencii*	250–450	R		s
Hauxwell's Thrush	*Turdus hauxwelli*	250–800	R	Mk, AC	s
White-necked Thrush	*Turdus albicollis*	250–850	R	AC	s
Motacillidae					
Paramo Pipit	*Anthus bogotensis*	3450–3500	R	AA	
Thraupidae					
Black-faced Tanager	*Schistochlamys melanopis*	600–2600	R		s
Magpie Tanager	*Cissopis leveriana*	250–1600	R	Mk, AC, **Co**, SP	s
Black-and-white Tanager	*Conothraupis speculigera*	250–500	A	Mk	s*

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Red-billed Pied Tanager	*Lamprospiza melanoleuca*	250–900	R	AC	s
Hooded Tanager	*Nemosia pileata*	250–500	R		p
Slaty Tanager	*Creurgops dentata*	1100–2500	R	Co. SP. Su. Pi	s
Black-capped Hemispingus	*Hemispingus atropileus*	2600–3500	R	Pi. LE	s*
Superciliaried Hemispingus	*Hemispingus superciliaris*	2500–3000	R	Pi. LE	s
Oleaginous Hemispingus	*Hemispingus frontalis*	1500–2500	R	Su	s*
Black-eared Hemispingus	*Hemispingus melanotis*	1100–2200	R	Co. SP. Su	s
Drab Hemispingus	*Hemispingus xanthophthalmus*	2200–3250	R	Pi. LE. AA	
Three-striped Hemispingus	*Hemispingus trifasciatus*	3000–3500	R	AA	s*
Gray-hooded Bush-Tanager	*Cnemoscopus rubrirostris*	1400–2500	R	Su. Pi	p
Rufous-chested Tanager	*Thlypopsis ornata*	2500–3250	R	LE. AA	
Orange-headed Tanager	*Thlypopsis sordida*	250–600	R		s
Rust-and-yellow Tanager	*Thlypopsis ruficeps*	1500–3500	R	Su. Pi. LE. AA	s
Black-goggled Tanager	*Trichothraupis melanops*	1000–1650	R	Co. SP	s
Yellow-crested Tanager	*Tachyphonus rufiventer*	250–1250	R	Mk. AC. Co	s
Flame-crested Tanager	*Tachyphonus cristatus*	300	R		
White-shouldered Tanager	*Tachyphonus luctuosus*	250–850	R	Mk. AC. Co	s
White-winged Shrike-Tanager	*Lanio versicolor*	250–1000	R	Mk. AC	s
Masked Crimson Tanager	*Ramphocelus nigrogularis*	250–1000	R	Mk	s
Silver-beaked Tanager	*Ramphocelus carbo*	250–1600	R	Mk. AC. Co. SP	s
Blue-gray Tanager	*Thraupis episcopus*	250–1600	R	Mk. AC. Co. SP	s
Palm Tanager	*Thraupis palmarum*	250–1600	R	Mk. AC. Co. SP	s
Blue-capped Tanager	*Thraupis cyanocephala*	1500–3000	R	SP. Su. Pi. LE	s
Blue-and-yellow Tanager	*Thraupis bonariensis*	1000–3500	R	Co. Su. LE. AA	s
Hooded Mountain-Tanager	*Buthraupis montana*	2500–3250	R	Pi. LE. AA	s*
Scarlet-bellied Mountain-Tanager	*Anisognathus igniventris*	2600–3400	R	Pi. LE. AA	s
Blue-winged Mountain-Tanager	*Anisognathus somptuosus*	1600–3000	R	SP. Su	s*
Grass-green Tanager	*Chlorornis riefferii*	2100–3200	R	Su. Pi. LE. AA	s*
Buff-breasted Mountain-Tanager	*Dubusia taeniata*	1900–3200	R	Pi. LE. AA	s*
Chestnut-bellied Mountain-Tanager	*Delothraupis castaneoventris*	2600–3500	R	Pi. LE. AA	s*
Fawn-breasted Tanager	*Pipraeidea melanonota*	450–3000	R	AC. SP. Su. Pi. LE	s
Yellow-throated Tanager	*Iridosornis analis*	1000–2200	R	SP. Su	s
Golden-collared Tanager	*Iridosornis jelskii*	2200–3500	R	Pi. LE. AA	s
Orange-eared Tanager	*Chlorochrysa calliparaea*	1000–2200	R	Co. SP. Su	s
Turquoise Tanager	*Tangara mexicana*	250–1000	R	Mk. AC. Co	s
Paradise Tanager	*Tangara chilensis*	250–1600	R	Mk. AC. Co. SP	s
Green-and-gold Tanager	*Tangara schrankii*	250–1100	R	MK. AC. Co	s
Golden Tanager	*Tangara arthus*	600–1800	R	Co. SP	s
Saffron-crowned Tanager	*Tangara xanthocephala*	1000–2500	R	Co. SP. Su. Pi	s
Golden-eared Tanager	*Tangara chrysotis*	850–1600	R	Co. SP	s
Flame-faced Tanager	*Tangara parzudakii*	1550–2000	R	SP	
Yellow-bellied Tanager	*Tangara xanthogastra*	250–1300	R	Mk. AC. Co. SP	s
Spotted Tanager	*Tangara punctata*	600–2000	R	Co. SP	s
Bay-headed Tanager	*Tangara gyrola*	250–1500	R	Mk. AC. Co. SP	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Golden-naped Tanager	*Tangara ruficervix*	1000–2100	R	Co, SP	s
Blue-browed Tanager	*Tangara cyanotis*	1300–2000	R	SP	
Blue-necked Tanager	*Tangara cyanicollis*	500–2000	R	Mk, Co, SP	s
Masked Tanager	*Tangara nigrocincta*	250–1100	R	Mk, AC, Co	s
Beryl-spangled Tanager	*Tangara nigroviridis*	1500–2500	R	SP, **Su**, Pi	s
Blue-and-black Tanager	*Tangara vassorii*	1900–3250	R	**Su**, Pi, **LE**, AA	s
Silver-backed Tanager	*Tangara viridicollis*	800–2600	R	SP, Su	
Opal-rumped Tanager	*Tangara velia*	250–600	R	Mk, AC	
Opal-crowned Tanager	*Tangara callophrys*	250–950	R	Mk, AC, Co	s
Swallow-Tanager	*Tersina viridis*	250–1450	R	**Mk**, AC, Co, SP	s
White-bellied Dacnis	*Dacnis albiventris*	250–400	R		
Black-faced Dacnis	*Dacnis lineata*	250–1300	R	Mk, AC, Co, SP	s
Yellow-bellied Dacnis	*Dacnis flaviventer*	250–1000	R	Mk, AC, Co	s
Blue Dacnis	*Dacnis cayana*	250–1550	R	Mk, AC, Co, SP	s
Purple Honeycreeper	*Cyanerpes caeruleus*	250–1400	R	Mk, **AC**, Co, SP	s
Red-legged Honeycreeper	*Cyanerpes cyaneus*	250–1000	R	Mk	
Green Honeycreeper	*Chlorophanes spiza*	250–1200	R	**Mk**, **AC**, **Co**, SP	s
Golden-collared Honeycreeper	*Iridophanes pulcherrimus*	1100–1800	R	Co, SP	
Guira Tanager	*Hemithraupis guira*	250–1100	R	Mk, Co	
Yellow-backed Tanager	*Hemithraupis flavicollis*	250–700	R	AC	s
Chestnut-vented Conebill	*Conirostrum speciosum*	250–900	R	Co	s
Cinereous Conebill	*Conirostrum cinereum*	2850–3500	R	LE, AA	
Blue-backed Conebill	*Conirostrum sitticolor*	2300–3350	R	Pi, LE, AA	
Capped Conebill	*Conirostrum albifrons*	1200–3000	R	Su, Pi, LE	
White-browed Conebill	*Conirostrum ferrugineiventre*	2700–3500	R	AA	
Tit-like Dacnis	*Xenodacnis parina*	3450–3500	R	AA	
Rusty Flower-piercer	*Diglossa sittoides*	1900–3500	R	Su, LE	s
Moustached Flower-piercer	*Diglossa mystacalis*	2600–3500	R	Pi, **LE**, **AA**	s
Black-throated Flower-piercer	*Diglossa brunneiventris*	2600–3500	R	Pi, LE, AA	s
Deep-blue Flower-piercer	*Diglossa glauca*	1000–2300	R	SP, Su	s
Bluish Flower-piercer	*Diglossa caerulescens*	1600–2700	R	SP, Su, LE	s
Masked Flower-piercer	*Diglossa cyanea*	1500–3500	R	Su, **Pi**, **LE**, **AA**	s
Plush-capped Finch	*Catamblyrhynchus diadema*	2000–3250	R	Su, Pi, **LE**, **AA**	s
Incertae sedis[9]					
Common Bush-Tanager	*Chlorospingus ophthalmicus*	1000–2400	R	Co, SP, **Su**, Pi	s
Yellow-whiskered Bush-Tanager	*Chlorospingus parvirostris*	1100–2600	R	Co, **SP**, **Su**, Pi	s
Yellow-throated Bush-Tanager	*Chlorospingus flavigularis*	800–1600	R	Co, **SP**	s
Ash-throated Bush-Tanager	*Chlorospingus canigularis*	1000–1600	R		s
Hepatic Tanager	*Piranga flava*	800–2000	R	Co	s
Summer Tanager	*Piranga rubra*	250–1500	B	SP	
Scarlet Tanager	*Piranga olivacea*	250–1500	B	Co	s
White-winged Tanager	*Piranga leucoptera*	900–1800	R	Co, SP	s
Red-crowned Ant-Tanager	*Habia rubica*	250–1000	R	Mk, **AC**	s
Carmiol's Tanager	*Chlorothraupis carmioli*	450–1250	R	**AC**, SP	s
Bananaquit	*Coereba flaveola*	250–1500	R	Mk, Co, SP	s
Dull-colored Grassquit	*Tiaris obscura*	600	R		s
Emberizidae					
Rufous-collared Sparrow	*Zonotrichia capensis*	2500–3500	R	Pi, LE, AA	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Yellow-browed Sparrow	*Ammodramus aurifrons*	250–1600	R	**Mk**, **AC**, **Co**, SP	s
Peruvian Sierra-Finch	*Phrygilus punensis*	3600	R		
Plumbeous Sierra-Finch	*Phrygilus unicolor*	3500	R		
Slaty Finch	*Haplospiza rustica*	950–3200	R	SP, **Su**, Pi, **LE**, **AA**	s*
Blue-black Grassquit	*Volatinia jacarina*	250–1000	R	Mk, Co	s
Slate-colored Seedeater	*Sporophila schistacea*	250–1200	R	**Co**, SP	S*
Lesson's Seedeater	*Sporophila bouvronides*	250–750	A		s
Lined Seedeater	*Sporophila lineola*	250–1000	A		s
Black-and-white Seedeater	*Sporophila luctuosa*	300–2000	R	**Mk**, Co, SP, **Su**	s
Yellow-bellied Seedeater	*Sporophila nigricollis*	300–1500	R		
Double-collared Seedeater	*Sporophila caerulescens*	250–600	A	Mk	
Chestnut-bellied Seedeater	*Sporophila castaneiventris*	250–1450	R	**Mk**, Co	s
Lesser Seed-Finch	*Oryzoborus angolensis*	250–1500	R	**Mk**, Co	s
Black-billed Seed-Finch	*Oryzoborus atrirostris*	250–500	R		s
Band-tailed Seedeater	*Catamenia analis*	3000–3500	R		
Plain-colored Seedeater	*Catamenia inornata*	3300–3500	R	AA	
Paramo Seedeater	*Catamenia homochroa*	2850–3450	R	LE, **AA**	s*
Pectoral Sparrow	*Arremon taciturnus*	250–1000	R	Mk, AC, Co	s
Chestnut-capped Brush-Finch	*Buarremon brunneinucha*	1300–2150	R	SP, SU	s
Stripe-headed Brush-Finch	*Buarremon torquatus*	2500–3250	R	Pi, AA	s
Olive Finch	*Lysurus castaneiceps*	900–1800	R	Co, **SP**	s
Black-faced Brush-Finch	*Atlapetes melanolaemus*	1400–3200	R	SP, **Su**, **Pi**, **LE**, **AA**	s
Red-capped Cardinal	*Paroaria gularis*	250–500	R		s
Cardinalidae					
Golden-bellied Grosbeak	*Pheucticus chrysogaster*	650–3500	R	LE	
Black-backed Grosbeak	*Pheucticus aureoventris*	600–3250	R	Su, LE, AA	s
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	2600	V		
Yellow-shouldered Grosbeak	*Parkerthraustes humeralis*	250–650	R	AC	s*
Slate-colored Grosbeak	*Saltator grossus*	250–1000	R	**Mk**, **AC**, Co	s
Buff-throated Saltator	*Saltator maximus*	250–1500	R	**Mk**, **AC**, **Co**, SP	s
Grayish Saltator	*Saltator coerulescens*	250–900	R	Mk, AC, Co	s
Golden-billed Saltator	*Saltator aurantiirostris*	2600–3500	R	LE	s*
Blue-black Grosbeak	*Cyanocompsa cyanoides*	250–1400	R	Mk, AC, Co	s
Parulidae					
Golden-winged Warbler	*Vermivora chrysoptera*	2800	V		
Tropical Parula	*Parula pitiayumi*	700–1500	R	Mk, Co, SP	s
Blackburnian Warbler	*Dendroica fusca*	950–3000	B	Pi	s
Cerulean Warbler	*Dendroica cerulea*	700–1250	B	Co	s
Connecticut Warbler	*Oporornis agilis*	250–500	B		
Masked Yellowthroat	*Geothlypis aequinoctialis*	250–500	R	Mk	s
Canada Warbler	*Wilsonia canadensis*	650–1600	B		s
Slate-throated Redstart	*Myioborus miniatus*	550–2100	R	**Co**, SP, **Su**	s
Spectacled Redstart	*Myioborus melanocephalus*	1600–3350	R	SP, Su, Pi, LE, AA	s
Two-banded Warbler	*Basileuterus bivittatus*	750–1500	R	Co, SP	s

Continued.

		Elevational range (m)	Seasonal status	Localities	Documentation
Golden-bellied Warbler	*Basileuterus chrysogaster*	250–1200	R	Mk, AC, Co	s
Citrine Warbler	*Basileuterus luteoviridis*	2150–3400	R	Su, Pi, LE, AA	s
Pale-legged Warbler	*Basileuterus signatus*	1700–2900	R	Su, LE	s
Russet-crowned Warbler	*Basileuterus coronatus*	1100–2550	R	Co, SP, Su, Pi	s
Three-striped Warbler	*Basileuterus tristriatus*	1100–2100	R	Co, SP, Su	s
Buff-rumped Warbler	*Phaeothlypis fulvicauda*	250–1500	R	**Mk, AC, Co**, SP	s
Icteridae					
Russet-backed Oropendola	*Psarocolius angustifrons*	250–1900	R	**Mk, AC**, Co, SP, **SU**	s
Dusky-green Oropendola	*Psarocolius atrovirens*	1000–2700	R	SP, **Su**, LE	s*
Crested Oropendola	*Psarocolius decumanus*	250–1300	R	Mk, AC, Co, SP	s
Olive Oropendola	*Psarocolius bifasciatus*	250–800	R	Mk, **AC**, Co	s
Casqued Oropendola	*Clypicterus oseryi*	250–800	R	Mk, **AC**	s
Mountain Cacique	*Cacicus chrysonotus*	2300–3250	R	**Pi**, LE, AA	r
Selva Cacique	*Cacicus koepckeae*	500	R		r
Solitary Cacique	*Cacicus solitarius*	250–850	R	**Mk**, Co	s
Yellow-rumped Cacique	*Cacicus cela*	250–1050	R	**Mk**, AC, Co	s
Red-rumped Cacique	*Cacicus haemorrhous*	250–1000	R		
Yellow-billed Cacique	*Amblycercus holosericeus*	2600–3300	R	LE	s*
Troupial	*Icterus icterus*	250–800	R		s
Epaulet Oriole	*Icterus cayanensis*	250–1200	R	Mk, AC, Co	s
Pale-eyed Blackbird	*Agelastictus xanthophthalmus*	250–500	R		s
Giant Cowbird	*Molothrus oryzivorus*	250–800	R	Mk, AC	s
Shiny Cowbird	*Molothrus bonariensis*	250–500	R		
White-browed Blackbird	*Leistes superciliaris*	600	V		p
Bobolink	*Dolichonyx oryzivorus*	250–500	B		
Fringillidae					
Hooded Siskin	*Carduelis magellanica*	400–3500	R	Mk, **AC, Co**, SP, **Su**, Pi	s
Olivaceous Siskin	*Carduelis olivacea*	1100–2100	R	SP, Su	?
Purple-throated Euphonia	*Euphonia chlorotica*	250–450	R		
Thick-billed Euphonia	*Euphonia laniirostris*	250–1500	R	**AC**, Co	s
White-lored Euphonia	*Euphonia chrysopasta*	250–950	R	**Mk**, AC, Co	s
Bronze-green Euphonia	*Euphonia mesochrysa*	600–1800	R	Co, SP	s
White-vented Euphonia	*Euphonia minuta*	250–1050	R	Mk, AC, Co	s
Orange-bellied Euphonia	*Euphonia xanthogaster*	250–2100	R	Mk, **AC, Co, SP, Su**	s
Rufous-bellied Euphonia	*Euphonia rufiventris*	250–950	R	Mk, AC	s
Blue-naped Chlorophonia	*Chlorophonia cyanea*	250–1900	R	AC, **Co**, SP	s

[1] An individual photographed by Walker on 22 September 1995 at Cocha Salvador along the Rio Manu is the only confirmed record for Peru.

[2] The taxonomy of small hermits in southeastern Peru is uncertain. The treatment here follows Remsen et al. (2006), which is based on Hinkelmann and Schuchmann (1997). The common taxon in MBR is *longipennis*, treated by Remsen et al. (2006) as a subspecies of *ruber*. This taxon has been treated variously as a subspecies of *ruber* (e.g., Peters 1945; Schuchmann 1999; Dickinson 2003) or *stuarti* (e.g., Meyer de Schauensee 1966, 1970). Two specimens at the Field Museum that were collected in 1980 from 450 m at the base of the Pantiacolla were identified as nominate *stuarti* by Hinkelmann. All other specimens from MBR are *longipennis*. On the basis of this overlap, Hinkelmann and Schuchmann treated *stuarti* and *longipennis* as belonging to different species. Recent reexamination of these specimens and additional material from MBR suggests that these specimens are actually the green extreme of a variable population of hermits that belong to the taxon *longipennis* (Stotz and T. Schulenberg, pers. obs.) Farther out in the lowlands of southeastern Peru, another subspecies of *ruber*, *nigrocincta*, has been collected (Rio Colorado) as well as photographed. Additionally, Walker (pers. obs) believes he has seen

this small, more intensely colored form along forest streams in the lower parts of the Manu area, but there is no documentation of this. Our suspicion is that *longipennis* is best treated not as a subspecies of *ruber* but rather as a subspecies of *stuarti* and that birds at Manu are all *longipennis*, except perhaps for a population of *ruber* in the lower parts of the area. Clearly, further fieldwork needs to be focused on small hermits in the region.

[3] The treatment of highland populations in the *Momotus momota* complex is controversial. Remsen et al. (2006) treat *aequatorialis* (comprised of two subspecies) as conspecific with the lowland *momota*. It is clear from the documentation accompanying this decision that one of the primary factors in lumping *aequatorialis* into *momota* was the existence of other lowland taxa within *momota* that were likely just as deserving of species status. In the absence of specific studies of the appropriate taxonomic rank for these taxa, the committee thought that there was no reason to treat *aequatorialis* differently.

We treat *Momotus aequatorialis* as distinct from *M. momota* to emphasize its disjunct elevational range in Manu and throughout its range (e.g., Hilty & Brown, 1986; Ridgely & Greenfield, 2001) and in recognition of its long treatment as distinct by a number of authors (Chapman, 1923; Hilty & Brown, 1986, Fjeldså & Krabbe, 1990; Ridgely & Greenfield, 2001; Dickinson, 2003).

[4] *Philydor erythrocercum* is a widespread Amazonian foliage-gleaner. *Philydor ochrogaster* is the montane representative of it from central Peru to northern Bolivia. It is sometimes treated as a separate species (e.g., Sibley & Monroe, 1990), but its treatment as a subspecies by Remsen et al. (2006) is consistent with that by most authors. We treat it as a separate species here to emphasize its disjunct elevational range in Manu and throughout its range while acknowledging that there may be intergradation with the subspecies *subfulvus* in northern Peru (Ridgely & Tudor, 1994).

[5] The Amazonian *Xiphocolaptes orenocensis* is occasionally treated as a distinct species from the Central American and Andean *Xiphocolaptes promeropirhynchus* (e.g., American Ornithologists' Union, 1983). However, most authors concur with their treatment by Remsen et al. (2006) as conspecific. We treat these taxa as separate species here in part because of the vocal differences between them but mainly to emphasize the distinct elevational ranges of the Amazonian *orenocensis* and the Andean forms of *promeropirhynchus*.

[6] Two subspecies of *Myiarchus tuberculifer* replace one another elevationally in the Andes. The highland population *atriceps* and a lowland *tuberculifer* intergrade in the Andes of southern Bolivia (Lanyon, 1978). In Manu, there are *M. tuberculifer* along the entire elevational gradient. The similarity of the two forms and lack of specimens at intermediate elevations make it impossible for us to distinguish the elevational range of the two forms. The lowest elevation for which there is a specimen of *atriceps* in Manu is 1050 m; the highest *tuberculifer* specimen comes from 300 m.

[7] The species treated here as incertae sedis (as in Remsen et al., 2006) include a number of taxa usually treated as cotingas, although most have at one time or another been placed in other families, especially Tyrannidae. Recent studies (Prum et al., 2000; Johansson et al., 2002; Chesser, 2004) indicate that the taxa from *Tityra* through *Pachyramphus* form a monophyletic group, but whether that group should be part of Cotingidae or a separate family (Tityridae) remains unclear. *Piprites* has usually been treated as a member of Pipridae. Most recent studies have not found evidence to support its inclusion there but have not made a convincing case for an alternate treatment.

[8] *Donacobius* was long treated in Mimidae but more recently has been treated in Troglodytidae (e.g., American Ornithologists' Union, 1983). Molecular studies by Barker (2004) showed that *Donacobius* belonged in neither Mimidae nor Troglodytidae but did not provide a clear alternative placement within an existing family. As a result, Remsen et al. (2006) treat it as incertae sedis, as do we.

[9] Recent molecular studies suggest that a number of genera traditionally placed in Thraupidae are not tanagers. Additionally, a set of mostly island taxa, spread among a several families but placed mainly in Emberizidae, form a monophyletic group associated with Thraupidae (Klicka et al., 2000; Burns et al., 2002, 2003; Yuri & Mindell, 2002). Because of incomplete taxon sampling and some disagreement among different studies of the placement of some genera, Remsen et al. (2006) treat these taxa as incertae sedis, awaiting the results of additional ongoing studies.

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UNIVERSITY OF ILLINOIS-URBANA
3 0112 078859417

Field Museum of Natural History
1400 South Lake Shore Drive
Chicago, Illinois 60605-2496
Telephone: (312) 665-7055